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OFFICIAL REGISTER OF
HARVARD UNIVERSITY

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HARVARD MEDICAL
SCHOOL



AND
SCHOOL OF DENTAL MEDICINE

1965-1966

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HARVARD MEDICAL SCHOOL

25 SHATTUCK STREET
BOSTON · MASSACHUSETTS 02115

AND SCHOOL OF DENTAL MEDICINE

188 LONGWOOD AVENUE
BOSTON · MASSACHUSETTS 02115

1965 — 1966

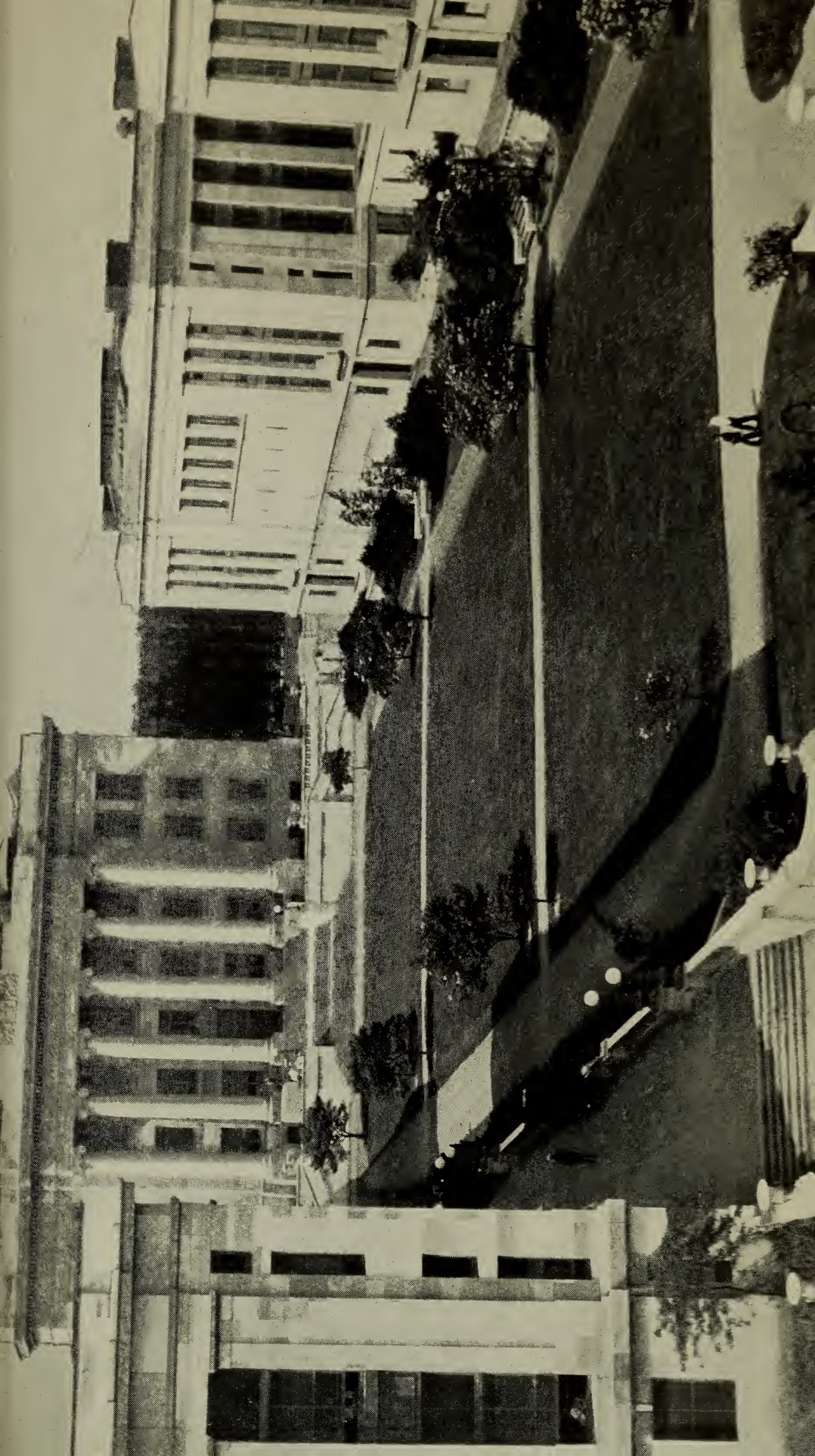
WITH AN ANNOUNCEMENT FOR 1966-1967

PUBLISHED BY HARVARD UNIVERSITY
CAMBRIDGE, MASSACHUSETTS

The Offices of Administration of the Medical School are located in the Administration Building at 25 Shattuck Street, Boston; those of the School of Dental Medicine, at 188 Longwood Avenue, Boston.

The office of the President of the University is located at One Massachusetts Hall, Cambridge.

The Comptroller's Office is in Holyoke Center, Cambridge. It is open on all business days from 9:00 a.m. to 5:00 p.m., except Saturdays, for the receipt of fees, payments, and other financial business.





A, B, C, D, E. Harvard Medical School buildings. 1. Harvard School of Public Health. 2. Children's Hospital. 3. Beth Israel
Hospital. 4. Vanderbilt Hall. 5. Boston Living-in Hospital. 6. Harvard School of Dental Medicine. 7. Peter Bent Brigham Hospital.
8. Massachusetts General Hospital. 9. Harvard School of Public Health. 10. Harvard School of Public Health.

CONTENTS

ACADEMIC CALENDAR	4
PRESIDENT AND FELLOWS OF HARVARD COLLEGE	7
THE BOARD OF OVERSEERS	8
OVERSEERS' COMMITTEE TO VISIT THE MEDICAL SCHOOL AND THE SCHOOL OF DENTAL MEDICINE	10
ADMINISTRATIVE OFFICERS	11
ADMINISTRATIVE BOARD	13
HISTORY AND ORGANIZATION	15
BUILDINGS	17
SCHOOL OF DENTAL MEDICINE	18
LIBRARIES	19
WARREN ANATOMICAL MUSEUM	20
HOSPITAL FACILITIES	21
Beth Israel Hospital	21
Boston City Hospital	21
Boston Lying-in Hospital	22
Children's Hospital Medical Center	22
Free Hospital for Women	25
McLean Hospital	25
Massachusetts Eye and Ear Infirmary	26
Massachusetts General Hospital	26
Massachusetts Mental Health Center	28
New England Deaconess Hospital	28
Peter Bent Brigham Hospital	28
Veterans Administration Hospital (West Roxbury)	29
HARVARD MEDICAL CENTER	30
REQUIREMENTS FOR ADMISSION	30
COURSES FOR GRADUATES	40
DIVISION OF MEDICAL SCIENCES	41
SCHOOL OF PUBLIC HEALTH	42
GENERAL REGULATIONS	43
Examinations and Promotion	43
Leaves of Absence	45
Withdrawal from the School	46
DEGREES	46
FEES AND EXPENSES	49
Microscopes	51
Dormitory	52

HARVARD MEDICAL SCHOOL

Dining Hall	52
Student Health Service	53
Student Employment	53
FELLOWSHIPS	54
SCHOLARSHIPS	57
LOAN FUNDS	85
PRIZES	90
LECTURESHIPS	91
CANCER COMMISSION OF HARVARD UNIVERSITY	92
RESEARCH FUNDS	93
OPPORTUNITIES FOR RESEARCH	94
THE UNDERGRADUATE ASSEMBLY	95
GENERAL PLAN OF INSTRUCTION	95
The First Two Years	95
The Third and Fourth Years	96
The Tutorial Program and Student Research	98
Division of Hours	102
ANNOUNCEMENT OF COURSES	103
Anatomy	103
Bacteriology and Immunology	108
Biological Chemistry	115
Dental Medicine Courses in the Medical School	125
Dermatology	126
Medicine	129
Neurology	157
Neuropathology	163
Obstetrics and Gynecology	164
Ophthalmology	171
Howe Laboratory of Ophthalmology	174
Orthopedic Surgery	176
Otology and Laryngology	181
Pathology	184
Division of Forensic Pathology—Dept. of Legal Medicine	192
Pediatrics	194
Pharmacology	205
Physiology	210
Preventive Medicine	215
Psychiatry	219
Radiology	241
Surgery	245
Interdepartmental and Special Courses	264
Tropical Public Health	265
School of Public Health	267

HARVARD MEDICAL SCHOOL

DEGREES CONFERRED IN 1965	268
INTERNSHIPS, CLASS OF JUNE 1965	273
STUDENTS ENROLLED IN MEDICAL SCHOOL	280
Colleges Represented.	300
Medical Schools Represented	301
SCHOOL OF DENTAL MEDICINE	302
Staff	305
Announcement of Courses	309
Degrees Conferred in 1965	317
Students Enrolled	318
Colleges Represented	321
Medical Schools Represented	321
PROFESSORS EMERITI	322
OFFICERS OF ADMINISTRATION AND INSTRUCTION	324
INDEX	339

HARVARD MEDICAL SCHOOL

ACADEMIC CALENDAR FOR 1965-1966

<i>Monday</i>	<i>July 5</i>	Independence Day: a holiday.
<i>August 23-September 12</i>		Vacation for the Class of 1966.
<i>Monday</i>	<i>September 6</i>	Labor Day: a holiday.
<i>Friday</i>	<i>September 10</i>	Registration Day for second and third year classes.
<i>Monday</i>	<i>September 13</i>	Academic year begins for second year class. Introduction to the Clinic begins for third year class. Registration Day for fourth year class (Class of 1966). Principal Clinical Year continues for Class of 1966.
<i>Friday</i>	<i>September 17</i>	Registration Day for first year class.
<i>Monday</i>	<i>September 20</i>	Academic year begins for first year class.
<i>Tuesday</i>	<i>October 12</i>	Columbus Day: a holiday.
<i>Thursday</i>	<i>November 11</i>	Veterans' Day: a holiday.
<i>Thursday</i>	<i>November 25</i>	Thanksgiving Day: a holiday.
<i>Saturday</i>	<i>December 4</i>	Introduction to the Clinic ends for third year class (Class of 1967). Principal Clinical Year ends for Class of 1966.
<i>Monday</i>	<i>December 6</i>	Principal Clinical Year begins for Class of 1967. Reading Period begins for Class of 1966 (fourth year class).
<i>December 19, 1965- January 2, 1966</i>		Recess for first, second, and fourth year classes.
<i>Monday</i>	<i>January 3</i>	Elective Period begins for fourth year class.
<i>Tuesday</i>	<i>January 18</i>	Second half year begins for second year class.
<i>February 7-11</i>		Examination period for first year class.
<i>Monday</i>	<i>February 14</i>	Second half year begins for first year class.
<i>Tuesday</i>	<i>February 22</i>	Washington's Birthday: a holiday.
<i>February 27-March 6</i>		Recess for the Class of 1967.
<i>Friday</i>	<i>April 1</i>	Last day for filing application for the degree of M.D. in June 1966.

ACADEMIC CALENDAR

		Last day for filing application for scholarship for 1966-1967.
<i>April 10-17</i>		Recess for first and second year classes.
<i>Friday May 27</i>		Alumni Day.
<i>Saturday May 28</i>		Class Day for the Class of 1966.
<i>Monday May 30</i>		Memorial Day: a holiday.
<i>June 6-11</i>		Examination period for second year class.
<i>Saturday June 11</i>		Second half year ends for first year class.
<i>Thursday June 16</i>		Commencement.

ACADEMIC CALENDAR FOR 1966-1967

<i>Monday July 4</i>		Independence Day: a holiday.
<i>August 22-September 11</i>		Vacation for Class of 1967.
<i>Monday September 5</i>		Labor Day: a holiday.
<i>Friday September 9</i>		Registration Day for second and third year classes.
<i>Monday September 12</i>		Academic year begins for second year class. Introduction to the Clinic begins for third year class. Registration Day for fourth year class (Class of 1967). Principal Clinical Year continues for Class of 1967.
<i>Friday September 16</i>		Registration Day for first year class.
<i>Monday September 19</i>		Academic year begins for first year class.
<i>Wednesday October 12</i>		Columbus Day: a holiday.
<i>Friday November 11</i>		Veterans' Day: a holiday.
<i>Thursday November 24</i>		Thanksgiving Day: a holiday.
<i>Saturday December 3</i>		Introduction to the Clinic ends for third year class (Class of 1968). Principal Clinical Year ends for Class of 1967.
<i>Monday December 5</i>		Principal Clinical Year begins for Class of 1968. Reading Period begins for Class of 1967 (fourth year class).
<i>December 18, 1966- January 2, 1967</i>		Recess for fourth year class.
<i>December 22, 1966- January 4, 1967</i>		Recess for first and second year classes.

HARVARD MEDICAL SCHOOL

<i>Tuesday</i>	<i>January 3</i>	Elective Period begins for fourth year class.
<i>Tuesday</i>	<i>January 17</i>	Second half year begins for second year class.
<i>January 30–February 4</i>		Examination period for first year class.
<i>Monday</i>	<i>February 6</i>	Second half year begins for first year class.
<i>Wednesday</i>	<i>February 22</i>	Washington's Birthday: a holiday.
<i>February 26–March 5</i>		Recess for Class of 1968.
<i>Monday</i>	<i>April 3</i>	Last day for filing application for the degree of M.D. in June 1967.
		Last day for filing application for scholarship for 1967–1968.
<i>April 16–23</i>		Recess for first and second year classes.
<i>Friday</i>	<i>May 26</i>	Alumni Day.
<i>Saturday</i>	<i>May 27</i>	Class Day for the Class of 1967.
<i>Tuesday</i>	<i>May 30</i>	Memorial Day: a holiday.
<i>June 5–10</i>		Examination period for second year class.
<i>Saturday</i>	<i>June 10</i>	Second half year ends for first year class.
<i>Thursday</i>	<i>June 15</i>	Commencement.

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HARVARD COLLEGE

This Board is commonly known as the CORPORATION

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SECRETARY TO THE CORPORATION

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HARVARD MEDICAL SCHOOL

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HARVARD MEDICAL SCHOOL

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† *Chairman.*

‡ *Secretary.*

HISTORY AND ORGANIZATION OF THE HARVARD MEDICAL SCHOOL

On September 19, 1782 the President and Fellows of Harvard College adopted a report by President Joseph Willard and former Acting President Edward Wigglesworth embodying a plan for a medical school. This action was followed on November 22, 1782 by the appointment of Dr. John Warren of Boston as the first Professor of Anatomy and Surgery. Shortly thereafter Dr. Benjamin Waterhouse was appointed Professor of the Theory and Practice of Physic. The original faculty was completed in May, 1783, when Dr. Aaron Dexter was named Professor of Chemistry and Materia Medica.

The Harvard Medical School, now nearing the close of its second century of uninterrupted teaching dedicated to the treatment and prevention of the ills of man, was the third medical school to be established in the United States. The first school was organized in 1765 in the College of Philadelphia (now the University of Pennsylvania), the second in 1767 in King's College (now Columbia University).

The first degrees of Bachelor of Medicine awarded by Harvard University were conferred in 1788. Until 1811, the degrees of Bachelor of Medicine and Doctor of Medicine were conferred, the former on graduation from the Medical School, the latter on examination at least seven years after graduation. In 1811 the degree of Doctor of Medicine was granted to graduates of that year and to earlier graduates who had not been admitted to it. All graduates since 1811 have received the degree of Doctor of Medicine.

During its long history, the Medical School has occupied seven different sites. The first classes were held in the basement of Harvard Hall in the Harvard College Yard. Later they were transferred next door to Holden Chapel, a building which was

HARVARD MEDICAL SCHOOL

originally the College Chapel but through the years has served as a carpenter shop, a chemistry laboratory, a museum, and is now the home of the Harvard Glee Club. To be close to such hospital facilities as might be developed in Boston, the Medical School, in 1810, was moved out of the Yard to quarters at 49 Marlborough Street (now 400 Washington Street) in Boston. Six years later, the Medical School occupied the first structure built especially for its use, located on Mason Street in Boston. At this time, and for a period of 42 years thereafter, the School bore the title of "The Massachusetts Medical College of Harvard University."

In 1847, new quarters were established on North Grove Street opposite the Massachusetts General Hospital and here the School remained until 1883, when the move was made to 688 Boylston Street and a building that was expected to be the "home of medicine for generations." The School's vigorous growth soon made these quarters inadequate. Accordingly, the five marble buildings that today form the Longwood Avenue Quadrangle were erected. At their dedication on September 25, 1906, Dr. Charles W. Eliot, President of the University, in his acceptance address, described them as: "The largest single addition to the resources of the University which has ever been placed in the hands of the Corporation since it received its charter in 1650."

These buildings were built on 11 acres of an original 26 acre tract, the remaining 15 acres being reserved for the hospital facilities that, it was expected, would be built around the School. Four hospitals and the Harvard Schools of Dental Medicine and Public Health are now located in this general area.

Prior to 1906 most clinical teaching was carried on in the Massachusetts General and Boston City Hospitals. Opportunities for clinical teaching and investigation have increased greatly since the Longwood Quadrangle was established, through the new hospitals surrounding the School and affiliated with it.

HARVARD MEDICAL SCHOOL

BUILDINGS

The Administrative Building (A), with 60,000 square feet of floor space, contains the Faculty Room, the Administrative Offices of the Medical School, the Alumni Office, the Courses for Graduates Office, the Warren Anatomical Museum, the News Office for the Medical Area, and the teaching laboratories for Histology and Neuroanatomy.

The laboratory buildings, designated by the letters B, C, D, and E, were all constructed on the same general plan—two parallel wings united at the front by an amphitheatre with a seating capacity of two hundred and fifty. To keep pace with present day requirements, the original facilities are continually being adapted, remodeled and even rebuilt while preserving the outside walls. In Building B, added research laboratories and teaching facilities have replaced the amphitheatre. Both the smaller rooms and the laboratories are designed on a unit system which greatly simplifies changes required in suiting these rooms to the future needs of departments. The amount of floor space varies considerably in each of the four buildings.

Building B accommodates the Departments of Anatomy and Pharmacology. In this building each wing has five floors and a total floor space of 132,000 square feet.

Building C provides space for the Departments of Biological Chemistry and Physiology, and the Office of the Division of Medical Sciences. In this building there are four floors in one wing and five floors in the other. The building has a total floor space of 111,525 square feet.

Building D is occupied by the Departments of Bacteriology, Pathology, Preventive Medicine, the Division of Medical Sciences Laboratory, the Biophysics Laboratory, and laboratories of the Department of Medicine. In this building each wing has five floors, with a total floor space of 91,500 square feet.

Building E houses the Department of Legal Medicine, the Department of Tropical Public Health of the School of Public Health and teaching facilities for Gross Anatomy. A new addi-

HARVARD MEDICAL SCHOOL

tion provides quarters for Surgical Research. There are three floors in one wing and four floors in the other, with a floor space of 62,000 square feet.

Vanderbilt Hall, the student dormitory, was opened in 1927.

The Francis A. Countway Library of Medicine described on page 19 was opened in 1965.

SCHOOL OF DENTAL MEDICINE

Founded in 1867, the Harvard School of Dental Medicine was the first university affiliated school for dentistry in the United States. The School, a responsibility of the Faculty of Medicine since 1899, offers a four year course that leads to the degree of Doctor of Dental Medicine.

During the first two academic years the courses of instruction are nearly identical with those of the Medical School. The third and fourth years are under the direct supervision of the staff of the School of Dental Medicine. The recipient of the degree of D.M.D. from the School of Dental Medicine is well prepared to meet State Board requirements for license to practice dentistry. Graduates are also ready for the advanced study and experience recommended for any of the specialties of dentistry.

Access to the research laboratories of the School in the elective time during the third and fourth years permits unusual training for those having dental research in mind as a career.

The requirements for admission parallel those of the Medical School, except that the Dental Aptitude Test is required in place of the Medical College Admission Test. Qualified students and graduates of approved medical schools who wish to specialize in dentistry may be admitted to the School of Dental Medicine with advanced standing.

A brief description of the program of the School of Dental Medicine can be found on page 302. Full details are available in the Dental School's Catalogue.

HARVARD MEDICAL SCHOOL

LIBRARIES

The Francis A. Countway Library of Medicine, opened its doors to readers in June 1965. Located at the Medical School, it combines the resources and services of the Harvard Medical Library and the Boston Medical Library. Among libraries serving medical schools, it is among the largest in the country. Its recorded holdings number 400,000 volumes, and it receives 4,200 different periodicals. The Countway Library is open:

8:00 a.m. to 11:30 p.m. weekdays

9:00 a.m. to 5:00 p.m. Saturdays

2:00 p.m. to 6:00 p.m. Sundays

In addition to its holdings of current books and periodicals, the Countway Library has extensive collections of historical materials, dating from the 15th Century. Its History of Medicine Department provides modern facilities for the use of these books and other rarities.

For the convenience of the several departments of the School, collections of books and journals are maintained in a number of other buildings. Among the more important convenience collections are:

Anatomy Library (Building B, 3d floor)

Bowditch Library of Physiology and Biochemistry (Building C, 3d floor)

George Burgess Magrath Library of Legal Medicine (Building E, 3d floor)

Library of Dental Medicine (188 Longwood Avenue)

Lucien Howe Library of Ophthalmology (at the Massachusetts Eye and Ear Infirmary)

All members of the University may borrow from the College Library at Cambridge. Messenger service is provided daily from the College Library and various other University Libraries.

The Boston Public Library issues cards to permanent and to temporary residents of Boston. Others may obtain cards upon payment of a small fee. Other libraries of the Boston area, not-

HARVARD MEDICAL SCHOOL

ably those of the Massachusetts Institute of Technology, add to the total book and periodical resources available to students.

The librarian is Ralph T. Esterquest, and Dale G. Friend is chairman of the Library Committee of the Faculty.

WARREN ANATOMICAL MUSEUM

The Warren Anatomical Museum was founded in 1847 by John Collins Warren, of the College Class of 1797, Adjunct Professor of Anatomy and Surgery from 1809 to 1815, Hersey Professor of Anatomy and Surgery from 1815 to 1847, Professor *Emeritus* from 1847 to his death in 1856, son of John Warren, the first Hersey Professor of Anatomy and Surgery.

The Curator of the Museum is Dr. Don W. Fawcett, Hersey Professor of Anatomy.

The collection comprises several thousand specimens illustrating both normal and pathological anatomy. These include dissections, skeletons, viscera, and the Dwight Collection illustrating skeletal variations and cross sections of bones. There is a growing number of gross neuropathological specimens and an extensive series of total brain sections prepared under the direction of the former Curator, Dr. Paul I. Yakovlev. These are available for study by qualified graduate students upon application to the Department of Neuropathology.

Also housed in the Museum are the records of the Longitudinal Studies of Child Health and Development conducted between 1929 and 1960 by Dr. Harold C. Stuart, Professor *Emeritus* of Maternal and Child Health at the Harvard School of Public Health. These records pertain to 134 children followed from birth to their eighteenth year and 175 other children followed from birth for shorter periods. The data include health histories, radiographs of skeletal development, body measurements, measurements of intelligence and observations on the family and home environment. Permission to use these records for research purposes may be obtained through the Department of Maternal and Child Health, Harvard School of Public Health.

HOSPITAL FACILITIES

BETH ISRAEL HOSPITAL

This is a general hospital with a capacity of 370 beds (including 20 pediatric, 56 obstetrical), and 62 bassinets. All of these beds are available for teaching. Incorporated in 1916, this institution has been located on Brookline Avenue around the corner from the Harvard Medical School since 1928 and has a close working relationship with it. The hospital is equipped for teaching and research in medicine, surgery, obstetrics and gynecology, pathology, pediatrics, psychiatry, and radiology, each under the direction of one or more full-time physicians who are members of the Faculty of the Harvard Medical School. There are also electrocardiograph, electroencephalograph, chemistry and metabolism laboratories, animal research facilities, a radiology department with facilities for X-ray therapy, and a department of physical medicine and rehabilitation. During the past year, more than 35,000 patients received care through this Hospital as in-patients, out-patients, in emergency ward or through the Home Care Program. Out-patient visits totalled 61,000 and more than 18,000 visits were made to the Emergency Ward. There were 12,000 patients admitted to the Hospital and 2,600 deliveries.

BOSTON CITY HOSPITAL

This hospital with all its divisions contains 1,257 beds, including 90 bassinets for newborn and 166 beds for infants and children. Over 300 are available to the teaching units of the Medical School. The Second and Fourth Medical Services, the Fifth Surgical Service, the Neurological and Neurosurgical Services are under the direction of Professors of the Harvard Medical School, and in addition there are other specialties open to students. In the Out-Patient Department and Accident Floor there were 416,543 patient visits during the year 1962.

HARVARD MEDICAL SCHOOL

The Thorndike Memorial Laboratory, established in 1923 for medical research, includes a metabolism ward and is an integral part of the Harvard Medical Unit. It is an internationally known center of medical investigation in the treatment of blood disorders, infectious diseases and disorders of the liver, kidney, thyroid and heart. The Sears Surgical Laboratory, established in 1955 as part of the Harvard Surgical Unit, is associated with the Fifth Surgical Service under the direction of the Professor of Surgery who is Head of that Service. It provides a modern amphitheatre, conference rooms, animal quarters, library, and laboratories for surgical research. The Departments of Neurology and of Pathology also maintain active research laboratories. In addition there are well-equipped service laboratories for pathology, chemistry, metabolism, and immunology. Four amphitheatres and various conference rooms are used in student instruction. The hospital maintains an admirable general working library and two special libraries.

BOSTON LYING-IN HOSPITAL

This hospital occupies a building started in 1922 at 221 Longwood Avenue. Richardson House, the private wing, was completed in 1930. There are 174 beds, of which 53 are on the ward service and 121 are on the private service. During the past year there were 8,517 adult admissions to the hospital. A total of 6,141 births were recorded. Chemistry, Pathology, Bacteriology, Cytology, and Blood Bank Laboratories, and a well-equipped X-ray department are available for research. The Hospital which was founded in 1832 has been in continuous existence since 1873. A research building was opened in 1960.

CHILDREN'S HOSPITAL MEDICAL CENTER

This is an affiliation of ten voluntary institutions concerned with the care of children, with teaching, with research, and with child health. Included are the following:

HOSPITAL FACILITIES

The Children's Hospital

This hospital has been located on Longwood Avenue adjacent to the Medical School since 1914. It is a general hospital for the care of children from infancy through adolescence. Pediatric, surgical, neurosurgical, neurological, orthopedic, dental, radiologic, psychiatric, pathologic, and otolaryngologic services with their associated specialties are maintained. Special clinical facilities are provided for adolescents. There are 343 beds, with an average daily census in 1965 of 290 patients. During the year ending September 30, 1965, it rendered 105,945 days of care to 11,412 in-patient admissions. (These figures are inclusive of The Children's Hospital, Infants' Hospital, Sharon Sanatorium, The House of the Good Samaritan, and the Judge Baker Guidance Center.) In addition, there were 139,828 visits to 51 out-patient clinics. Full laboratory and diagnostic services are provided for the study of material from the house and out-patient services.

The Sharon Sanatorium

This organization sponsors the Sharon Cardiovascular Unit composed of 28 beds devoted to the care of non-rheumatic cardiovascular disorders including congenital heart disease. It is included in The Children's Hospital as described above.

The Infants' Hospital

Established as a memorial to Thomas Morgan Rotch, Jr., the Infants' Hospital operated in close conjunction with The Children's Hospital from 1923 to 1961, at which time there was a complete merger. There are 29 beds which are devoted to the care of infants in addition to a separate neonatal nursery accommodating 12 infants under the age of one month, including prematures.

The House of the Good Samaritan and

The Hospital and Convalescent Home for Children

The House of the Good Samaritan is situated at 25 Binney Street

HARVARD MEDICAL SCHOOL

adjacent to the Medical School. There are 37 beds devoted to the care of long-term and convalescent patients and to the study of rheumatic fever and rheumatic heart disease.

In February, 1959, the renovated Good Samaritan building was reoccupied and became a long-term and convalescent care facility of the Children's Hospital. The Hospital and Convalescent Home for Children in Wellesley Hills was closed about the same time and its activities transferred to the Good Samaritan. This now provides 37 beds including 15 beds for respirator cases or patients requiring long-term orthopedic care. The study and treatment of rheumatic diseases continues. Out-patient clinics are held regularly as a part of this research program. The building also houses the endocrine laboratories of The Children's Hospital.

The Children's Mission to Children

A social service agency providing counseling service to parents whose children have medical and emotional problems. Also available is a foster home and a group home program for children who cannot remain at home.

The Children's Cancer Research Foundation

An affiliate of The Children's Hospital Medical Center, the Foundation conducts programs of diagnosis, treatment, and clinical investigation of leukemia and other forms of cancer in children, and of cancer research housed in two buildings, the larger of which is the Jimmy Fund Building.

Ten floors of laboratories are devoted to both basic medical research and to more specific programs of cancer research concerned with prevention, eradication, and cure of disseminated cancer, with greatest emphasis on cancer chemotherapy.

The Judge Baker Guidance Center

A child psychiatry clinic whose treatment, training, and research programs are affiliated with those of the Department of Psychiatry

HOSPITAL FACILITIES

of The Children's Hospital Medical Center. The in-patient service has 26 beds. This unit has constructed a building in close proximity to The Children's Hospital, expanding and integrating the program in psychiatry.

FREE HOSPITAL FOR WOMEN

This hospital is devoted exclusively to the care of women, with emphasis on the treatment of diseases peculiar to them. It has 90 beds, of which at least 32 are available for teaching. In 1964-65, 3,438 patients were admitted, of whom 3,202 were operated on. In the out-patient department 14,192 patients were seen during this time, of whom 1,612 were new. In addition to standard laboratory facilities and a library, the hospital has laboratories for research, oriented chiefly toward pathology, reproduction and neoplasia.

MCLEAN HOSPITAL

This hospital for the care and treatment of patients with all types of psychiatric disorders is situated in Belmont and is a division of the Massachusetts General Hospital. In addition to the inpatient service it offers day care, night care, and outpatient treatment programs. One fifth of the patients are adolescents and the hospital operates a high school on its grounds. McLean Hospital was the first hospital in New England and is the third oldest mental hospital in the United States. It has a complement of 254 beds, with approved capacity of 278 beds, and has been a teaching hospital connected with the Harvard Medical School for many years. During the past fiscal year 385 patients were admitted to the hospital and 366 patients were discharged. It is equipped with laboratories for research in clinical physiology, neuropathology and neurochemistry, and clinical psychology. It maintains an experimental program in clinical application of social anthropology and sociology.

HARVARD MEDICAL SCHOOL

MASSACHUSETTS EYE AND EAR INFIRMARY

The Infirmary, incorporated in 1827, and associated with the Harvard Medical School since 1866, is a voluntary specialty hospital engaged in patient care, research and teaching in the fields of Ophthalmology and Otolaryngology. The Chiefs of the two clinical services are appointed jointly by the Infirmary and the Medical School, where they also hold full professorships.

Many members of the Medical Staff also serve on the Faculty and give instruction to the medical students both at the School and at the Infirmary itself where most of the 178 beds are available for teaching. The short average patient stay of approximately five and one half days results in high occupancy of about eighty five per cent and in the fiscal year 1965, 10,321 patients were admitted, of whom 10,289 had operations.

Although the Infirmary and its neighbor, the Massachusetts General Hospital, are separate and independent institutions, they join together in the operation of ambulatory clinics. In 1965, the Eye and the Ear, Nose, and Throat clinics together recorded 70,531 patient visits.

Eye research at the Infirmary is conducted in the Howe Laboratory of Ophthalmology which, though a department of the Medical School, has been housed at the Infirmary since 1932. In otolaryngological research, the best known laboratory is the Eaton-Peabody Laboratory of Auditory Physiology, a joint venture of the Infirmary and Massachusetts Institute of Technology.

MASSACHUSETTS GENERAL HOSPITAL

This general hospital, founded in 1811, in great part owes its existence to the foresight and ambition of two members of the faculty of the Harvard Medical School, Dr. James Jackson and Dr. John Collins Warren, son of Dr. John Warren, the first Professor of Anatomy and Surgery at the Medical School.

In a circular letter addressed (August, 1810) "to the most influential and wealthy citizens of Boston," Drs. Warren and Jack

HOSPITAL FACILITIES

son noted the benefits that would accrue to the ill of the community through establishment of a hospital, and to the collateral advantages that would follow. Among the latter, "are the facilities for acquiring knowledge which it (the hospital) would give to the students in the medical school (Harvard) established in this town."

The Hospital opened its doors in 1821 with Dr. Warren as Surgeon-in-Chief and Dr. Jackson as Physician-in-Chief. The close and salutary relationship established at the outset between the Medical School and the Hospital has continued to the present.

In the Hospital there are services in medicine, surgery, pediatrics, dermatology, genito-urinary diseases, orthopedics, gynecology, neurology, neurosurgery, anaesthesia, dental medicine, physical medicine, and psychiatry, all of which are used in giving instruction in these special departments of medicine. The Hospital has 1,016 beds, all of which are available for teaching purposes. There were 28,678 patients admitted to the Hospital in 1964-65. Large clinics are also used for instruction in the above clinical subjects. Clinic visits numbered 210,304 last year, of which 13,498 were first visits of new patients. There were 56,073 patients treated in the emergency ward. Laboratories for pathology, bacteriology, chemistry, metabolism, medical and surgical research, and radiology are maintained, and there is an excellent medical library, all of which are open to students in the Medical School.

In 1942 arrangements were made with the Vincent Memorial Hospital and the Hall Mercer Hospital to care for their patients in the Massachusetts General Hospital. The Vincent occupies the three lower floors of the Vincent-Burnham Building, with the three floors above comprising the Burnham Memorial for Children.

In 1943 the Collis P. Huntington Memorial Hospital and its associated laboratories of the Harvard Cancer Commission were transferred from their former location adjacent to the Medical School to the buildings of the Massachusetts General Hospital.

HARVARD MEDICAL SCHOOL

MASSACHUSETTS MENTAL HEALTH CENTER (formerly the Boston Psychopathic Hospital)

This is a state institution for acute, curable, incipient, and doubtful cases of mental disease. The hospital was opened to patients in June, 1912 as a department of the Boston State Hospital. It became a separate institution in 1920. It has 200 beds, of which 14 are available for children. All of the beds are available for teaching and receive patients at the rate of about 900 a year. The hospital is equipped with psychological, clinical, biochemical, and research laboratories. The out-patient department is made up of an adult and child division and receives more than 4,000 new patients per year — total patient visits number more than 45,000. In addition to the psychoses and neuroses, the clinical material includes cases of maladjustment, personality problems, behavior disorders of childhood and mental defect.

NEW ENGLAND DEACONESS HOSPITAL

A 375-bed general hospital which includes the Deaconess, Central, George F. Baker, and the Palmer Memorial buildings for general beds; the Hospital Teaching Unit for ambulatory diabetic patients; the Norwich House for patients requiring intensive short-term psychiatric care, and the Cancer Research Institute. The hospital is known for its work in cancer, diabetes, general medicine, all types of surgery, and for its contributions to teaching and research. The Departments of Pathology and Radiology provide diagnostic and treatment facilities for all patients from the above named units as well as for patients referred from the Joslin, Lahey, and Overholt Thoracic Clinics, and the independent staff who are housed in the new Deaconess Medical Office Building adjoining the hospital.

PETER BENT BRIGHAM HOSPITAL

Since its dedication in 1913, this hospital has been closely associated with the Medical School. The hospital, equipped for teaching

HOSPITAL FACILITIES

and research in physical diagnosis, medicine, surgery, radiology, and pathology is situated on grounds adjacent to the Medical School buildings. The Chiefs of Service are Professors of the Faculty of the Medical School. There are 315 beds, all of which are used for teaching purposes. During the past year, 7,875 patients were admitted. There are also a clinic and an emergency service. The total number of visits to these facilities last year was 72,444. There are well-equipped medical, surgical, and pathological laboratories. The hospital has a School of Nursing and the oldest program in the country for dietetic interns. Also located within the hospital are the offices of the Medical Area Health Service.

VETERANS ADMINISTRATION HOSPITAL (WEST ROXBURY)

This is a 300-bed hospital for the care of general medical and surgical patients, incorporating a center for the care of patients with spinal cord injuries. It is also a center for cardiovascular surgery. All the beds are available for teaching; there were 2,534 admissions during 1965.

The hospital is administered by the Veterans Administration but is professionally closely associated with the Peter Bent Brigham Hospital (8 miles distant), with which it is affiliated for the training of residents. It has complete laboratory and X-ray facilities, a research laboratory, and its own library.

Other hospitals in the Greater Boston area in which some teaching activities are carried on include: Lemuel Shattuck Hospital; Long Island Hospital (physical diagnosis); Metropolitan State Hospital; Middlesex County Sanatorium; Mt. Auburn Hospital (radiology); Pondville State Hospital and the Robert Breck Brigham Hospital.

HARVARD MEDICAL SCHOOL

HARVARD MEDICAL CENTER

A corporation known as the Harvard Medical Center was formed in 1956 by the Harvard Medical School and seven of its teaching hospitals “. . . to improve and advance the knowledge, practice and teaching of medicine . . . ; to assist in the advancement of medical research and investigation and the improvement of medical teaching facilities. . .”

The Center's Board of Trustees is made up of the Dean of the Faculty of Medicine, who serves as President, and a representative from each of the participating institutions, which are:

Harvard Medical School
Beth Israel Hospital
Boston Lying-in Hospital
Children's Hospital
Free Hospital for Women
Massachusetts Eye and Ear Infirmary
Massachusetts General Hospital — McLean Hospital
Peter Bent Brigham Hospital

Harvard is exceedingly fortunate in having both privately endowed and tax-supported teaching hospitals associated with the Medical School through joint faculty appointments, joint teaching responsibilities and joint research undertakings to foster maximally the correlation of teaching, research and patient care.

Tax-supported hospitals cannot legally be part of the Harvard Medical Center and it is for this reason that such important teaching hospitals as the Boston City Hospital, the Massachusetts Mental Health Center (formerly the Boston Psychopathic Hospital), and the West Roxbury Veterans Administration Hospital are not member institutions.

REQUIREMENTS FOR ADMISSION

In general, the Faculty of Medicine considers for admission those students who are in good standing in either arts or sciences

ADMISSION

and also graduates of colleges that are listed as approved in the "Higher Education Directory," which is published by the Office of Education of the United States Department of Health, Education and Welfare. Academic work in foreign universities must be supplemented by a year or more of study at an approved university in the United States. Candidates for admission to the first year class must not only have met the minimum requirements but they must present evidence that their academic achievement and other credentials have been of such quality as to predict a high degree of success in the graduate study of medicine. These include, among other things, the Medical College Admission Test scores, extra-curricular and summer activities, comments contained in letters of recommendation and the personal qualifications of the applicant. The selection of students is based on a total and comparative appraisal of the candidate's suitability for medicine. The student planning to embark upon a career in medicine would be well advised, therefore, to strive not for grades nor for a vocational training but for a good liberal education. He should seek to develop his intellectual, cultural and personal growth.

Tomorrow's physician must be accomplished in the science of medicine and skilled in the art of the practitioner, concerned with the social and environmental problems of people and a leader in civic and community affairs. He needs to have a broad education encompassing in some depth the natural sciences, the behavioral sciences, the arts and the humanities. Although he is expected to have a scholarly approach to one or more of these areas, narrow specialization with all of his educational effort being directed to one area is undesirable. Secondary school, college and medical school should become a continuum because of an ever improving quality of education at all levels.

The following are the minimal requirements (but not necessarily optimal):

English: Basic skill in the English language, including proficiency in grammar and spelling, is necessary to achieve facility for clear expression in both the written and spoken medium. It is expected

HARVARD MEDICAL SCHOOL

that the student will have at least four years of study of English composition and literature, at least one of these years being at the college level.

Foreign Language: The student is expected to have competence in a foreign language, not merely to increase ability to read more extensively in the medical literature, but to increase understanding of language itself and the help this provides in developing the art of communication. Either a modern or a classical language will meet this requirement, which presupposes the equivalent of at least two years of study at the college level. If an applicant has fulfilled the language requirement for a Bachelor's degree by obtaining a sufficiently high score on the College Board examination or by passing a college language placement test, he will be considered to have met the language requirement for admission to the Harvard Medical School. In such cases, however, an advanced course in the same foreign language is strongly recommended.

Mathematics: Mathematics, the language of science, is a basic tool for the successful study of medicine. At least one full year of calculus in either secondary school or college is a requirement. College algebra and similar college introductory courses will not suffice.

These basic skills in language and mathematics, which can be acquired in secondary school or in college, should be pursued in the former to the extent that an opportunity is available.

Chemistry: The equivalent of at least two full courses of chemistry in college is required. It is expected that there will be a minimum of one full course in both inorganic and organic chemistry. Adequate time in the laboratory, including familiarity with quantitative techniques, is important in this experience. If the student has advanced placement credit for introductory chemistry, it is recommended that a course in physical chemistry would best provide for the minimum requirement in inorganic chemistry and will be of

ADMISSION

considerable benefit to the study of biochemistry in medical school.

Biology: A student must have taken at least one full course of biology in college. His total biology experience (secondary school and college) should have emphasized structure, function, natural history and evolution of plants and animals. There should also have been an introduction to molecular biology. Laboratory experience in these courses is essential.

Physics: One full course of physics in college must be offered. If a student has advanced placement credit for secondary school physics, he should take a full year's work in one or more areas of advanced physics.

Recommended Courses: As mentioned above, physical chemistry will provide an additional background for the study of biochemistry. Comparative anatomy, genetics and embryology may be of help during the first two years of medical school.

Psychology and behavioral sciences have value for increasing the understanding of man. Such courses, however, cannot be considered as a substitute for gaining first hand knowledge of human activity through the study of literature, history, art and religion.

The undergraduate curriculum should contain both balance and depth. In general, approximately one half of the courses should be devoted to the study of humanities and at least one fourth to science.

Depth of knowledge and scholarly experience should be gained by selecting the field of major study which is of greatest interest to the student. The goal of a liberal education is an end in itself and should not be considered merely as preparation for a graduate school.

An increasing number of students are being admitted to college with advanced placement in one or more courses on the basis of superior ability and educational attainment in secondary school. The program of advanced placement is looked upon with favor

HARVARD MEDICAL SCHOOL

when it improves and increases the challenge of secondary school education and when it permits an enrichment of the student's college years by enabling him to take upper level and graduate level courses, but the program is not encouraged when the aim is merely to speed the student through college. Leaving college at the end of three years is undesirable unless a student's education has been delayed, and he is older than his classmates. In the final analysis, however, it is not the number of years in college or hours in a course, but the quality of education and maturity of a student that determines his readiness for medical school. Since the requirements for admission to the Harvard Medical School now include four courses in science in college, the student who has received advanced placement credit for secondary school science is fortunate in that he will thus enrich his knowledge of the sciences by studying courses at a more advanced level and at the same time assure himself of fulfilling the licensing requirement in all of the United States.

Honors courses and independent study are encouraged both for the educational depth they provide and more so because of the scholarly experience which will develop into a lifelong habit of self education.

No attempt should be made to anticipate the work actually given in medical school — to do so is a double mistake: it eliminates the chance to explore a field that will be unavailable later, and it may give the student a false sense of security in a subject with which he has some familiarity leading him to neglect it in medical school under the competitive pressure of other courses.

The Medical College Admission Test of the Association of American Medical Colleges is required of all applicants for admission and is given in May and October of each year. Applicants are urged, whenever possible, to take this test in May of the year preceding the expected date of matriculation. An application will not be considered from an applicant who has not taken the Medical College Admission Test by October of the year in which he applies.

ADMISSION

Information regarding this test, administered by the Psychological Corporation, may be obtained by writing to Medical College Admission Test, the Psychological Corporation, 304 E. 45th Street, New York, New York 10017.

Interview: When the Committee on Admission deems an interview to be helpful, the applicant will be requested to make an appointment with either a member of the Committee in Boston or, if at a distance, with a regional representative. Any applicant is welcome to seek an interview for information or for clarification of the data in his application.

Application Procedure: One class only is admitted each year, to begin in mid-September. Application blanks are ready for distribution after June 1 of the year preceding expected matriculation. These should be returned to the office of the Committee on Admission, Harvard Medical School, 25 Shattuck Street, Boston, Massachusetts 02115, as early in the fall as possible. *No application will be accepted after December 1.* If a student has not received acknowledgment of receipt of his application within two weeks after he has filed it, he should notify the office of the Committee on Admission.

The Admission Committee begins its consideration of applications shortly after the first of October. Since acceptance depends upon a comparison of the total picture of each applicant with all others, notification of acceptance will be sent only on November 15, December 15 and January 10. The majority of the places in the class are offered on the last date. The class roster is usually complete by January 15, when a waiting list is established to fill any vacancies which arise as a result of withdrawals. During the process of studying applications, when it appears that an applicant has little likelihood of being accepted, he will be informed of this fact so that he can make other plans for his medical education.

Applications will not be considered from candidates who have been refused admission on two prior occasions.

Since a complete catalogue is available in most college libraries,

HARVARD MEDICAL SCHOOL

it is not usually sent to individuals. The staff of the Admission Office encourages visits from potential applicants.

ADMISSION TO THE SECOND AND THIRD YEAR CLASSES AT THE HARVARD MEDICAL SCHOOL

The extensive clinical facilities for teaching in the third and fourth year make it possible to add a limited number of students to the class at the beginning of the third year. Only students of high scholastic standing will be considered for transfer. Preference will be given to applicants for transfer from two year medical schools. Applicants for transfer from other four year medical schools will be considered only if there are the most compelling reasons for such a transfer and the request has both the approval and hearty endorsement of the dean of the medical school from which a student wishes to transfer. It is requested that the dean's office submit both a transcript of academic performance in the medical school as well as a certificate indicating that the time spent in medical studies is at least equal to that of the class to which a student seeks admission. Full credit for work done elsewhere will be allowed as a rule.

Only an occasional vacancy occurs in the second year class, which may be available to properly qualified transferring students.

Applications for transfer into the second and third year classes may be obtained from the office of the Committee on Admission approximately one year prior to the expected date of transfer. Completed applications must be submitted by February 1 of the year of transfer. Decisions about transfers into the third year class are made during March. Decisions about transfers into the second year class are not usually determined until the end of the academic year.

No applications for transfer into the fourth year class are accepted.

ADMISSION

ADMISSION TO ADVANCED STANDING IN THE HARVARD SCHOOL OF DENTAL MEDICINE

The third year class may be increased by a small number of transfer students who have completed the equivalent of the first two years at the Harvard School of Dental Medicine. No student may transfer to the fourth year class without a special vote of the faculty in each instance.

Applicants for transfer will be required to take the first part of the National Board Examination in either dentistry or medicine. Applicants holding a degree from a dental school not accredited by the American Dental Association will be required to take the Science Achievement Test administered through the Council on Dental Education of the American Dental Association. Only students of high scholastic standing will be considered. They must be recommended as promising candidates by the Dean of the school from which they come. Full credit for work done elsewhere will be allowed as a rule, but in certain cases additional work may be required. Ordinarily such requirements can be completed during the summer holiday preceding transfer. All the requirements for the first year class must have been fulfilled by applicants for advanced standing.

INFORMATION FOR SERVICEMEN

The Harvard Medical School welcomes inquiries regarding future application from men who are now on active duty with the armed forces. The Committee on Admission cannot act on applications from men still on active duty and not released from service. The applications of men on terminal leave or whose date of discharge is definitely known may be considered by the Committee. The qualifications for admission remain essentially the same for veterans as for civilian applicants. Before the acceptance of a veteran can be final, the applicant will need to submit photostatic copies of discharge papers or similar evidence of honorable release. Where available the applicant should file also a copy of

HARVARD MEDICAL SCHOOL

his "Report of Separation" on which is listed in detail his service record and training. If the Committee does not act favorably on an application, certifications furnished by the applicant may be returned, at his request. It is the responsibility of the applicant to take the necessary steps toward obtaining the governmental benefits for which servicemen are eligible. On request, the section on Veterans Affairs of the Comptroller's Office at Harvard will furnish a statement of the necessary procedures to receive such benefits required by the Veterans Administration. The University has established this office to form a central point for answering inquiries and advising veterans. For matters relating to veterans' affairs and not connected directly with the Medical School, the applicant should feel free to write to the Comptroller's Office, Veterans Affairs, Holyoke Center, 1350 Massachusetts Ave., Cambridge, Massachusetts 02138.

APPLICATIONS FROM FOREIGN STUDENTS

A candidate from a foreign university may file application for admission, but if he has attended a university or medical school which has not received approval by the Approving Authority of the Commonwealth of Massachusetts, he must receive specific approval from the Authority before he can be admitted. In general, it is the policy of the Committee on Admission to require that foreign students spend two years studying at an approved undergraduate college in this country before applying for admission to the Harvard Medical School. This policy has been established in order both that the applicant may become familiar with the language, customs, and methods of teaching in the United States, and that the Committee may obtain a better evaluation of his qualifications and preparation for medicine. Exception to this policy may be made in the case of qualified applicants from schools in the British Isles.

Students seeking transfer to the second year class from foreign medical schools may be required to take the examinations in the first year subjects at the regular time they are given at the

ADMISSION

Harvard Medical School in January and June. Students applying for transfer to the third year at the Harvard Medical School will be required to take Part I of the examinations given by the National Board of Medical Examiners and to achieve scores satisfactory to the Committee on Admission.

FOREIGN STUDENTS

All students who are not citizens of the United States will be referred before registration to the Harvard International Office, Holyoke Center, 75 Mt. Auburn St., Cambridge 02138, where they must present a statement of admission, show their passports, and fill out a Student Registration form. They will then receive a card for presentation at registration, showing they have been cleared by the International Office.

This office serves as the official liaison agency between the University and the United States Department of State and Immigration and Naturalization Service. It maintains a registry of all non-U.S. citizens in the various Schools or Departments of the University, and it furnishes these members of the University community with information, not only on Immigration regulations, but on the facilities available to them through other Harvard offices, and from recognized outside organizations interested in the welfare, housing and hospitality of those unfamiliar with this country.

SPECIAL STUDENTS

Individuals wishing to take courses or to engage in special study under the Faculty of Medicine, who are not candidates for the degree of Doctor of Medicine or regularly enrolled as students under another Faculty of the University, may apply for admission as Special Students. Candidates should be mature individuals with serious and compelling reasons for wishing to pursue special programs of study at the Harvard Medical School. Application for admission to the status of Special Student should be

HARVARD MEDICAL SCHOOL

submitted to the Committee on Admission of the Faculty of Medicine. Each of these students will be under the charge of the Dean and a member of the Faculty designated by the Dean to serve as his special adviser. Admission to Special Student status is ordinarily for a maximum of one year. Only with the approval of the student's adviser, the departments concerned, and the Dean may this period be extended.

Tuition Fee: Varies according to the courses taken and is based on a proportion of the annual fee for instruction.

Special Auditors: Either Special Students, holders of a doctoral degree, or men who do not have the doctor's degree but have some equivalent scholarly or professional standing, may with the approval of the department head, apply to the Committee on Admission to attend courses as Special Auditors. They may not receive credit or take examinations in courses. Fee: \$25 per course.

Special Students at the Medical School wishing to take courses under the Faculty of Arts and Sciences must register with the Dean of Special Students, Holyoke Center, 75 Mt. Auburn St., Cambridge, Massachusetts 02138.

COURSES FOR GRADUATES

The object of this department of the Medical School is to offer to graduates in Medicine opportunities to continue their studies in a thorough and scientific manner.

For information concerning courses offered, the Catalogue of Courses for Graduates should be consulted.

Facilities at the Harvard Medical School and the abundant clinical opportunities in the various hospitals are available for graduate instruction. Eugene C. Eppinger, M.D., Assistant Dean, is in charge.

DIVISION OF MEDICAL SCIENCES

DIVISION OF MEDICAL SCIENCES

The Division of Medical Sciences as part of the Faculty of Arts and Sciences of Harvard University, provides facilities in the departments of Anatomy, Bacteriology, Biological Chemistry, Pathology, Pharmacology and Physiology of the Harvard Medical School for advanced study and investigation leading to the degrees of Doctor of Philosophy and Master of Arts. In addition to the facilities of these departments, those of other research laboratories of the Harvard Medical School and its affiliated hospitals are available for the education of students. The Division offers special courses for graduate students in addition to those available to them in the Departments of Biology, Chemistry, Physics, etc. of Harvard University. The study program of the entering student may thus be shaped to meet his or her specific needs and background. The aim of the Division is to provide a broad education in the biological fields mentioned and specialization in one of them for those who wish to pursue a career of research and teaching in medical schools and universities, or of research in government, foundation and industrial laboratories.

Candidates for admission should have a thorough grounding in the biological and physical sciences. This will usually be more than the minimum for admission to medical school. Advanced courses in biology, chemistry, and physics are ordinarily regarded as preferable to undergraduate courses in bacteriology, biochemistry, histology, etc. A reading knowledge of German and one other modern language is desirable but not required for admission. The candidate will be required, however, to pass an examination in German and one other foreign language before graduation.

The minimum requirement for the degree of Doctor of Philosophy consists of not less than two years — at least one of which must be in residence at Harvard — devoted to advanced studies approved as suitable preparation for the degree by the proper department. Ordinarily three or more years are required for the completion of formal courses and preparation of a thesis. In estimating the amount of a candidate's study for the degree, the

HARVARD MEDICAL SCHOOL

advanced work done in other graduate departments at Harvard or of other universities will be considered.

It is expected that the preparation of a thesis will require full time for usually not less than one and a half years. It must show original treatment of a fitting subject, give evidence of independent research, and be clearly, logically, and carefully written in good English. Following acceptance of his thesis, the candidate is given an oral Final Examination on the subject of his thesis and its relation to his special field and collateral subjects.

The minimum requirement for the degree of Master of Arts consists of a full year of residence and study. At least one quarter of the work must be more advanced than the regular introductory courses offered by the various departments, and should consist of research or individual preparation for research. In addition, each student must pass an examination in French or German. In some departments a thesis is required for the degree.

Candidates for the Doctor of Philosophy and Master of Arts degrees are registered in the Graduate School of Arts and Sciences for study in the Division of Medical Sciences. Students interested in graduate study in the Division should see the *General Announcement of the Graduate School of Arts and Sciences* and the pamphlet entitled *Higher Degrees in Medical Sciences*. These can be obtained from the Admission Office, Graduate School of Arts and Sciences, 75 Mt. Auburn Street, Cambridge, Massachusetts 02138.

Inquiries should be addressed to the Chairman of the Division of Medical Sciences, 25 Shattuck Street, Boston, Massachusetts 02115.

SCHOOL OF PUBLIC HEALTH

The School of Public Health is one of the graduate schools of the University. Instruction and research opportunities are available in the several fields which underlie the protection of health and the investigation and control of diseases in communities.

GENERAL REGULATIONS

These include such entities as biostatistics, epidemiology, public health practice, environmental health sciences and engineering. Other significant aspects of public health are represented by departments of demography and human ecology, microbiology, nutrition, tropical health, maternal and child health, and behavioral sciences.

In addition to the health problems of urbanized and technically advanced societies, the teaching and research activity of the school is concerned with the needs of those areas of the world where malnutrition and communicable disease are the principal afflictions.

Students enrolled in the Medical School may take courses at the School of Public Health with the approval of the Head of the Department concerned. Further information and a catalogue may be obtained from the Registrar at 55 Shattuck Street, Boston, Massachusetts 02115.

GENERAL REGULATIONS

In order that the time of study shall count as a full year, students of all upper classes must register on the first day of the session. A fee of \$10 is charged for late registration.

For special and approved purposes fourth year students may be allowed to take a portion of their work elsewhere than at the Harvard Medical School, provided the application be approved by the Dean in consultation with the Administrative Board and the head of the department concerned, and provided the student passes an examination on this work after its completion, conducted by a member of the Faculty of the Harvard Medical School.

EXAMINATIONS AND PROMOTION

Promotion from one class to another is contingent upon the satisfactory completion of the required work of each year. In each course, when indicated, students will be informed by their

HARVARD MEDICAL SCHOOL

instructors as early as possible when the progress of their work is unsatisfactory.

Final grades in each course will be based upon such examinations or other tests as are determined by each department. Grading is on the scale of A, B, C, D, and E (denoting failure).

Grades are averaged on the basis that A = 1, B = 2, C = 3, D = 4 and E = 6. In calculating this average, time devoted to a course is taken into account.

Promotion Boards

Promotion Boards have been appointed for the first, second and third years to review the work of each student at the end of the year or, at their option, at other times. The membership of these boards consists of one representative from each department whose grading, as noted above, affects the student's grade average and one member from the Committee on Examinations and not as voting members, the Dean or Assistant Dean, *ex-officiis*, and on the Promotion Boards of the first and second years, the Dean of the School of Dental Medicine, *ex-officio*.

It is the duty of the Promotion Boards to promote those qualified, to notify formally students whose work in any course is unsatisfactory—in certain cases requiring that such students repeat the year's work—and to recommend that unpromising students withdraw from the School.

Opportunity will be given to students to appeal the decision of a Promotion Board either at a special meeting or at the next regular meeting of the Board. Appeals must be sent to the Chairman of the Promotion Board, Harvard Medical School and, to be valid, be received by him within two weeks after the issuance of a Promotion Board's notice of formal action.

General Examination

A committee will give a General Examination to each candidate for the degree of M.D. It will recommend to the Faculty those who pass and are otherwise qualified for the degree and for honors. The conditions under which a student shall take a General Exam-

GENERAL REGULATIONS

ination and the character and content of the examination will be determined by the Committee subject only to rules of the Faculty.

A student becomes eligible to take a General Examination on successfully completing seven-eighths of his fourth year work. He may not anticipate the General Examination ahead of his class.

A student who fails three General Examinations is debarred from further attempts.

Rules Governing Promotion

1. A student with a grade averaging, for one year, from D(4) to E (6) will ordinarily be required to withdraw from the School.

2. A student whose grade for one year averages from 3.5 to 4 will be warned that his work is unsatisfactory. At the Promotion Board's discretion such a student may be required to repeat the year's work, or to withdraw from the School.

3. A student who is set back a year must repeat at least two assigned subjects and then he will not be promoted unless he obtains a grade of C or better in both of these subjects.

4. A student who is warned by a Promotion Board that his work is unsatisfactory and yet is permitted to advance with his class must attain for the ensuing year a grade average which is significantly better than in his previous year, failing which he must repeat the year's work, or, at the Board's discretion, he may be required to withdraw from the School.

5. A student failing in any course and yet permitted to advance with his class may not be promoted a second time nor will he be allowed to take the General Examination until that failure is removed.

6. A student failing any course will have an opportunity for re-examination only at a time set by the Promotion Board or with a succeeding class or section.

LEAVES OF ABSENCE

The Faculty of Medicine believe that certain students may profitably be granted a leave-of-absence from the School for specified periods of time in order to pursue at other institutions

HARVARD MEDICAL SCHOOL

studies and research activities related to medicine. A leave-of-absence for this purpose should be requested from the Dean's Office. It will be granted at the discretion of the Dean.

WITHDRAWAL FROM THE SCHOOL

A student may withdraw from the School voluntarily upon application to the Dean's Office.

A student may be required to withdraw from the School at any time if in the opinion of his instructors he is not competent to pursue his assigned course of study or if the Faculty of Medicine determine that he is for any reason unfit to continue as a student in the School. In addition, any student who is absent without leave from scheduled courses for more than a total of 30 days during the academic year will be required to withdraw from the School.

Application for reinstatement by any student who has withdrawn voluntarily or who has been required to withdraw from the School, must be received in writing by the Committee on Admission of Students at least four months prior to the requested date of readmission. Reinstatement will be made only upon the recommendation of the Committee on Admission.

DEGREES

DOCTOR OF MEDICINE

Every candidate for the degree of Doctor of Medicine at this University must be at least twenty-one years of age, and of good moral character. He must have fulfilled all the requirements for admission to this Medical School; give evidence of having studied in a recognized medical school at least four full years, of which one year must be spent in the regular fourth year course of this School; have passed all the required examinations; have dissected the three parts of the body to the satisfaction of the demonstrator; and furnish evidence of having engaged in the practical exercises in Medicine, Surgery and Obstetrics.

DEGREES

The degree of Doctor of Medicine *cum laude*, *magna cum laude*, or *summa cum laude* may be given to students of highest rating in the class, on recommendation of the Committee on Examinations and the Faculty.

The degree of Doctor of Medicine *cum laude*, *magna cum laude*, or *summa cum laude* for a thesis in a special field may be awarded to candidates for the degree of Doctor of Medicine on recommendation of the Committee on Examinations and the Faculty. The work for this may have been carried out under the Tutorial System or by independent arrangement with any member of the Staff.

The degree is awarded for original and meritorious investigation in a single subject or group of subjects and for evidence of ability, scholarship and persistent interest and industry. Candidates wishing to be considered for such honors in a special field must apply to the Dean's Office not later than March 1 of the year of graduation and must submit two typewritten copies of an original thesis prepared in form usual for publication. The written approval of the head of the department in which the work was completed must be attached.

The thesis should include an introduction with references to relevant literature; a brief statement of the purpose of the study; a description of the materials and methods employed; an account of the original observations included; a discussion of the results; a summary; and a list of the references used.

No candidate is eligible to graduate with honors for a thesis in a special field unless he has done creditable work in his regular curricular studies and has passed the General Examinations. In addition, any candidate whose qualifications are acceptable for honors in a special field must pass an oral examination before the Subcommittee on Honors in a Special Field and invited special examiners in which he will be examined not only on the subject of his thesis but on the general field of which it is a part.

Every candidate for the degree of M.D. must make application for it in writing on blanks furnished at the Dean's Office, on or before April 1.

HARVARD MEDICAL SCHOOL

DOCTOR OF DENTAL MEDICINE

Every candidate for the degree of Doctor of Dental Medicine at Harvard University must be at least twenty-one years of age and of good moral character. He must have fulfilled all the requirements for admission to this school; give evidence of having studied at least two full years in basic health sciences comparable to those offered in the first two years of this school and two years in a recognized dental school, of which one year must be spent in the regular fourth year course of the Harvard School of Dental Medicine. He must have passed all the required examinations and have satisfactorily completed the minimum requirements for work in the various laboratories and clinics.

The degree of Doctor of Dental Medicine *cum laude* or *magna cum laude* may be given to students of highest general rating in the class, on recommendation of the Committee on Examinations. The degree is also awarded, where appropriate, with honors for a thesis in a special field.

Application for the D.M.D. degree, on a form provided by the Dean's Office, must be filed at that office prior to April 1 in order for the student's name to be placed on the list of degree candidates at Commencement.

DOCTOR OF MEDICAL SCIENCES

Candidates for this degree must matriculate as medical students and complete with an honor grade the regular elementary courses offered by this School, together with such other subjects as may be recommended by the Faculty. Ordinarily this preparatory training will be equivalent to the first two years of the course of study leading to the degree of M.D. In addition, all candidates are required to have a reading knowledge of French and German. In estimating the amount of a candidate's study for the degree, study completed in other approved medical schools will be considered.

Following the completion of this preliminary training, the student shall devote himself for not less than two years to the inten-

FEES AND EXPENSES

sive study of one of the fundamental medical sciences and to the preparation of a thesis. The thesis must show an original treatment of a fitting subject and give evidence of independent research.

There shall be two examinations for every candidate for this degree: a general examination, before entering upon the work of the last two years, covering the elementary medical sciences; and a final examination, upon acceptance of the thesis, covering the particular medical science chosen as a special field.

HIGHER DEGREES IN THE MEDICAL SCIENCES

The degrees Doctor of Philosophy and Master of Arts are offered for advanced work in some special field in the medical sciences and are administered by the Faculty of Arts and Sciences, through the Division of Medical Sciences, which consists of faculty members of the preclinical departments of the Medical School. All candidates for these degrees are registered in the Graduate School of Arts and Sciences for study in the Division of Medical Sciences and must hold a degree in Arts or in Sciences from an approved college.

(See section on Division of Medical Sciences on page 41.)

FEES AND EXPENSES

An estimate of total yearly expenses shows that the average cost of the school year is approximately \$3,800 for each academic year. This estimate includes tuition, medical health fee, board and room, books, laundry, and incidentals.

The fees are:

Matriculation	\$5	
Medical Health Fee	\$82	each year
Instruction	\$2,000 *	each year

* Includes laboratory charges except microscope rental, breakage, damage, loss of apparatus, etc.

HARVARD MEDICAL SCHOOL

Term bills for the year 1965-66 are issued and payable as follows:

<i>Issued</i>	<i>Payable</i>	<i>Basic Charges</i>
At Registration	Presentation	$\left\{ \begin{array}{l} \frac{1}{4} \text{ Tuition for the year} \\ \frac{1}{2} \text{ Medical Health Fee} \end{array} \right.$
Nov. 20	Dec. 10	$\left\{ \begin{array}{l} \frac{1}{4} \text{ Tuition for the year} \\ \text{Board through Oct. 31} \\ \frac{1}{4} \text{ Room Rent for the year} \\ \text{Coupon Books through Oct. 31} \\ \text{Miscellaneous Charges} \end{array} \right.$
Jan. 20	Feb. 10	$\left\{ \begin{array}{l} \frac{1}{4} \text{ Tuition for the year} \\ \frac{1}{2} \text{ Medical Health Fee} \\ \text{Board through Dec. 31} \\ \frac{1}{4} \text{ Room Rent for the year} \\ \text{Coupon Books through Dec. 31} \\ \text{Miscellaneous Charges} \end{array} \right.$
Apr. 20	May 10	$\left\{ \begin{array}{l} \frac{1}{4} \text{ Tuition for the year} \\ \text{Board through March 31} \\ \frac{1}{4} \text{ Room Rent for the year} \\ \text{Coupon Books through March 31} \\ \text{Miscellaneous Charges} \end{array} \right.$
June 5 *	June 15	$\left\{ \begin{array}{l} \text{Board to the end of year} \\ \frac{1}{4} \text{ Room Rent for the year} \\ \text{Coupon Books to the end of the year} \\ \text{Miscellaneous Charges} \end{array} \right.$
June 30	July 15	$\left\{ \begin{array}{l} \text{Board to the end of year} \\ \frac{1}{4} \text{ Room Rent for the year} \\ \text{Coupon Books to the end of the year} \\ \text{Miscellaneous Charges} \end{array} \right.$

The term bills are sent to the student at his college address unless the Comptroller is requested in writing to send them elsewhere.

A fee of \$10 is automatically added to all bills which are unpaid by the due date.

* Applies only to candidates for degrees.

FEEES AND EXPENSES

Any student whose indebtedness to the University remains unpaid on the date fixed for payment is deprived of the privileges of the University until he is reinstated. Reinstatement is obtained only by consent of the Dean of the Department in which the student is enrolled, after payment of all indebtedness.

As a further condition for reinstatement a student who is delinquent in his financial obligations to the University is required to furnish a bond in the form prescribed by the University in the amount of \$1,000 as security for the payment of his future financial obligations to the University.

Students who are candidates for degrees in the middle of the academic year must pay all dues to the University at least one day before the day upon which the degrees are to be voted.

All indebtedness to the University must be paid by all candidates for degrees at least one day before Commencement.

When a student's connection with the University is severed, all charges against him must be paid at once.

Students will be held responsible for the payment of fees until they have notified the Dean, in writing, of their intention to withdraw from the School.

MICROSCOPES

The School requires that each student secure a standard student microscope, preferably less than twenty years old, with a minimum of two oculars and three objectives including an oil immersion lens. A mechanical stage is not essential. The minimum requirements are as follows:

2 oculars 5X and 10X

1 oil immersion objective

1 16mm. objective

1 4mm. objective

1 complete substage — Abbe condenser and Iris diaphragm

In addition, the following are recommended by the Department of Pathology:

1 scanning objective 2-3X

1 quadruple nosepiece

HARVARD MEDICAL SCHOOL

Under the auspices of the Student Faculty Committee, arrangements have been made for the quantity purchase, at a substantial discount, of the standard American, certain German and Japanese microscopes. The standard American and German monocular microscopes currently retail at about \$350, binoculars at about \$550.

Further information about the quantity purchase plan will be sent to each student.

The Medical School has about sixty-five binocular microscopes available for rental each year to first year students unable to provide their own. The rental charge is \$50 a year.

DORMITORY

Vanderbilt Hall, the Medical School dormitory, has accommodations for 305 male and 20 female students. The majority of the rooms are designed for one occupant. Many of the rooms communicate directly with the adjacent room, and there are also a number of suites for two or more persons. The price of rooms ranges from \$260 to \$505 per person for the academic year. Application forms for rooms in Vanderbilt Hall will be sent to all new students approximately four months before registration day. The date on which they must be returned in order to be included in the drawing will be announced at that time. Students are permitted to reengage their rooms for the following year by signing lease cards at the Dean's Office. The dormitory has squash courts, a tennis court, and a gymnasium which are open to members of the teaching staff and students of the Medical School. There is a parking lot for a limited number of automobiles behind the dormitory. The School assumes no responsibility for loss or damage to automobiles or other property left in the lot. First year students are urged not to bring cars.

DINING HALL

The dormitory contains a large dining hall which is available for all members of the medical area. First year students living

FEES AND EXPENSES

in Vanderbilt Hall will be required to pay full board, \$652, for the academic year (September 17, 1965 through June 11, 1966) for 21 meals a week. Second year students living in Vanderbilt Hall will be required to pay full board, \$670, for the academic year (September 10, 1965 through June 11, 1966) but in the second term compulsory meal contracts may be amended to provide for absence from lunch during the three clinic days of each week. A proportionate decrease in the full board rate will be made for the period involved. Students desiring the amended contract should apply to the Dining Hall checker. Graduate students and others living in the Hall will also be required to sign on for the 21 meals a week for their first two years of residence.

STUDENT HEALTH SERVICE

The Medical Area Health Service, providing medical care for the students, is open daily from 8:30 a.m. to 5:00 p.m. except Saturday afternoons, Sundays, and holidays. For emergency care at night and on holidays, the Emergency Service of the Peter Bent Brigham Hospital is open at all times and one of the staff of the Health Service is available by telephone. A complete medical examination of each new student is required at the beginning of the school year. This is conducted by appointment shortly after school opens.

Upon registration, each student receives a booklet which describes the medical services available from the Medical Area Health Service. Hospital insurance is available through the plan for wives and children of married students.

Successful small pox vaccination within three years prior to entrance to Harvard Medical School is required. A completed certification of vaccination must be submitted before registration.

Any illness necessitating absence from classes must be reported to the Health Service.

STUDENT EMPLOYMENT

Only a limited amount of outside work can be done without taxing a student's health and scholarship, and the student is urged,

HARVARD MEDICAL SCHOOL

when it is possible, to devote himself to a regular program of study and recreation, giving as little time to outside work as is feasible with his plan for financing his medical education. A limited number of positions offering room and board in return for laboratory or minor clinical services in hospitals are available to second, third, and fourth year students. Few opportunities are open to first year students.

FELLOWSHIPS

The Fellowship Funds of the Harvard Medical School are, except where otherwise noted, administered by a Standing Committee of the Faculty. Applications for support from these funds should be sent to the Dean's Office.

EDWARD HICKLING BRADFORD (1918). Anonymous. To be used for medical research or instruction separately or in connection with any other foundation, in such manner as may be prescribed.

BULLARD (1891). William Story Bullard, in memory of three physicians "distinguished for their honorable personal character and their professional services in this community":

GEORGE CHEYNE SHATTUCK MEMORIAL

JOHN WARE MEMORIAL

CHARLES ELIOT WARE MEMORIAL

Any one or all of these fellowships may be paid to any student or member of the medical profession appointed to make such original investigations in Medical Science as will be most useful to the profession and to the community. The results of these investigations shall not, however, be published as a research performed under the grant of a Bullard Fellowship, unless the work shall have received the approval of the Committee.

Holders of the fellowships must do throughout the academic year the equivalent of at least ten hours' work a week and make a report thereon.

FELLOWSHIPS

ARTHUR TRACY CABOT (1913). Dr. and Mrs. Frederick Cheever Shattuck. In memory of Arthur Tracy Cabot, A.B. 1872, M.D. 1876. For students of surgery. Ordinarily the incumbent may not engage in active practice, but is to devote himself to the advancement of surgery in the United States or elsewhere. Nomination to this fellowship is by preference to be made by the Moseley Professor of Surgery.

WALTER BRADFORD CANNON (1945). Mr. Joseph F. and Mrs. Clara Ford. A fellowship in Physiology.

HENRY A. AND CAMILLUS CHRISTIAN (1956). Henry A. Christian. To be appointed by the Hersey Professor of the Theory and Practice of Physic. The fellowship shall be held preferably by the same individual for a period of five years. The greater part of his time shall be devoted to medical investigation, preferably in the field of clinical medicine.

HAROLD C. ERNST MEMORIAL FUND (1938). Mrs. Ellen L. Ernst. A scholarship or fellowship in the Department of Bacteriology.

CHARLES FOLLEN FOLSOM (1908). Founded by more than sixty persons in memory of Charles Follen Folsom, A.B. 1862, M.D. 1870. A Teaching Fellowship in Hygiene or in Mental and Nervous Diseases. For the present assigned to the Department of Neuropathology-Neurology.

LOUIS W. GILBERT (1943). S. Louise Gilbert. Income to be used for the study of chronic diseases.

SAMUEL JORDAN GRAHAM (1961). E. Norma P. Graham. Fellowship in surgery.

JUDGE AND MRS. SAMUEL JORDAN GRAHAM MEMORIAL (1961). E. Norma P. Graham. Postgraduate study or research.

CHARLES DUSTIN HUNKING, M.D. (1948). Sarah S. H. Cheney, in memory of her brother, Charles Dustin Hunking, M.D., a member of the Class of 1871 of Harvard University and of the Class of 1876 of Harvard Medical School. To enable a graduate of

HARVARD MEDICAL SCHOOL

Harvard Medical School, who is also a native of Haverhill, Mass., to do medical research.

LOUIS E. KIRSTEIN (1937). Friends of Louis E. Kirstein. For the promotion of scientific medical education.

JOHN R. KISSINGER (1911). Harold C. Ernst. For a fellowship or salary of an individual engaged in the investigation of the causation of infectious diseases, preferably in the direction of tropical medicine. Recommendation to this fellowship is made by the Professor of Bacteriology in the Medical School.

WILLIAM O. MOSELEY, JR., TRAVELLING FELLOWSHIPS (1912). The bequest of Julia M. Moseley provides funds for fellowships available to graduates of the Harvard Medical School for purposes of postdoctoral study in Europe. So that these fellowships will be truly outstanding awards, the Committee has voted to set the stipend at \$8,500 per annum and to provide funds for travelling expenses. In considering candidates for the Moseley Travelling Fellowships, the Committee will give preference to those individuals who (1) have already demonstrated their ability to make original contributions to knowledge, (2) have planned a program of study which in the Committee's opinion will contribute significantly to their development as teachers and scholars, and (3) clearly plan to devote themselves to careers in academic medicine and the medical sciences. Individuals who have already attained Faculty rank at Harvard or elsewhere will not ordinarily be considered eligible for these awards.

Application forms may be obtained from, and completed applications should be sent to: Secretary, Committee on Fellowships in the Medical School, Harvard Medical School, 25 Shattuck Street, Boston, Massachusetts 02115. The Committee reserves the right to request candidates to present themselves for personal interviews.

FRANCIS WELD PEABODY MEMORIAL (1929). To be awarded on the recommendation of the Dean and full professors of Medi-

SCHOLARSHIPS

cine in charge of the clinics of the Boston City Hospital, the Massachusetts General Hospital, and the Peter Bent Brigham Hospital, to properly qualified graduates of medical schools to enable them to devote further time to intensive clinical and laboratory studies.

JEFFREY RICHARDSON (1933). William Lambert Richardson, A.B. 1864, M.D. 1867. To be awarded each year to some deserving student, upon his graduation from the Harvard Medical School, who desires to continue his studies either here or abroad.

HENRY P. WALCOTT (1910). Dr. Frederick Cheever Shattuck. For a Fellow in Clinical Medicine appointed on nomination by the Jackson Professor of Clinical Medicine. The recipient shall not engage in private practice but must devote his time to teaching and clinical research.

WHITMAN (1933). Mrs. Bernard C. Whitman, in memory of her husband Bernard C. Whitman, A.B. 1846, and of her son Crosby C. Whitman, A.B. 1886. Available for a graduate of Harvard Medical School pursuing the study of medicine or surgery at the École de Médecine de Paris.

WYMAN WHITEMORE (1963). Francis Lee Whittemore. Scholarships in surgery.

WILLIAM HUNTER WORKMAN (1925). William Hunter Workman, M.D. 1873. To enable one or more graduates of the Harvard Medical School to pursue postgraduate studies in medicine in this country or abroad. In exceptional cases, fourth year students will be eligible.

SCHOLARSHIPS

HARVARD MEDICAL SCHOOL NATIONAL SCHOLARSHIPS

In order to make it possible for young men of outstanding ability and promise to come to the Harvard Medical School, two or three

HARVARD MEDICAL SCHOOL

Harvard Medical School National Scholarships will be offered to incoming members of the first year class. These scholarships will carry a stipend sufficiently large, if necessary, to meet all the student's essential expenses. Successful applicants who maintain a high honor record at the Medical School will continue to hold these scholarships throughout the Medical School course.

The offer of these scholarships is made possible by gifts from Mr. Edward S. Harkness, Dr. Daniel F. Jones, and Dr. Franklin S. Newell. The donors expressed the hope that through these scholarships superior men who could otherwise not receive a medical education would be enabled to attend the Harvard Medical School. They also expressed the hope that some of these men might wish to return to their own communities to carry on the practice of medicine.

Direct application for these scholarships cannot be made since all accepted first year students are considered as candidates, the awards being made without reference to financial circumstances. The stipend will vary depending on the resources of the recipient.

GENERAL SCHOLARSHIPS

The following scholarships are open to students who have been admitted to the School at the time of application. Approximately \$145,000 is available annually from the general scholarship funds.

The Cheever, Gerry, Greene, and Haven Scholarships are awarded only to students of the first year class. The Hayden and Webster Scholarships may be so awarded. All the other scholarships are available to members of all classes.

Information concerning all forms of financial assistance may be obtained from the Dean's Office.

VIVIAN B. ALLEN (1954). To provide scholarship aid for men who are unable to pay their own way for medical training.

ANONYMOUS No. 60 (1960). To provide scholarships for students in the Medical School.

EDWARD DANA BARBOUR FUND (1928). For promoting medical

SCHOLARSHIPS

education in China, preference to students coming from Shanghai or its environs.

EDWARD M. BARRINGER FUND (1881). Edward M. Barringer. For the maintenance of two scholarships for students in the Harvard Medical School. Awarded to deserving students, preference being given to those of the fourth year class.

EDWARD M. BARRINGER NO. 1

EDWARD M. BARRINGER NO. 2

GORDON BARTLETT (1919). Mr. and Mrs. Donald Gordon, in memory of their nephew, Gordon Bartlett, a student at Dartmouth College who died of wounds at St. Mihiel while serving in the Seventeenth Field Artillery. Preference is given to graduates of Dartmouth College. This scholarship will ordinarily be divided between two men.

MATTHEW AND MARY E. BARTLETT (1916). Miss Fannie Bartlett, in memory of Matthew and Mary E. Bartlett. For the benefit of a worthy and meritorious student who is in need of financial assistance.

WALTER BAUER (1965). The Helen Hay Whitney Foundation. Scholarships or other beneficiary aid for any qualified student engaged in studies under the supervision of the Faculty of Medicine.

GEORGE PACKER BERRY (1965). Harvard Medical Alumni Association.

LUCIUS F. BILLINGS (1900). Lucius F. Billings. May be divided between two or more students.

DR. ROBERT BONNEY FUND (1944). Robert Bonney, M.D. 1898. For the aid of needy and meritorious students.

JOHN WHITE BROWNE (1918). Mrs. Francis B. Greene. Scholarships for students in the Harvard Medical School.

JAMES JACKSON CABOT (1906). Arthur T. Cabot, Samuel Cabot

HARVARD MEDICAL SCHOOL

and Guy C. Cabot. For the support of scholarships for students in the Medical School.

HENRY FASSETT CASTLE (1941). William E. Castle, A.B. 1893, A.M. 1894, Ph.D. 1895, as a memorial to his son, Henry Fassett Castle, who died in November, 1919, at the age of 19, having completed the previous June the work of the first year in the Medical School.

DAVID WILLIAMS CHEEVER (1889). David Williams Cheever, A.B. 1852, M.D. 1858, LL.D. For a first year student after three months' study in the Medical School.

DAVID WILLIAMS CHEEVER #2 (1947). David Cheever, A.B. 1879, M.D. 1901. To be awarded at the beginning of the year to a first year medical student in hope that after the stated probationary period he may be awarded the scholarship founded by David Williams Cheever, A.B. 1852, M.D. 1858.

ELEANOR DWIGHT CLARK (1938). For one or more scholarships of the type of the Harvard National Scholarships.

OWEN COPP (1936). Hattie G. Copp. To assist one or more needy and worthy students.

COTTING GIFT (1900). Benjamin E. Cotting, A.B. 1834, M.D. 1837. Awarded on the basis of pecuniary need, intellectual capacity, faithfulness, and earnest endeavor.

MYRON DENTON (1956). Myron P. Denton, in memory of his father.

ORLANDO W. DOE (1893). Orlando Witherspoon Doe, A.B. 1865, M.D. 1869. To be given annually to a deserving student in the Medical department.

GEORGE RUSSELL EAGER (1936). Miss Mabel T. Eager, in memory of her father.

HENRY EHRLICH MEMORIAL (1927). Friends and family of Henry Ehrlich, M.D. 1886. To be used for the assistance of needy and worthy students regardless of creed or color.

SCHOLARSHIPS

RUSSELL DUNSON ELLIOTT (1950). Awarded annually to properly qualified applicants, preferably of Anglo-Saxon ancestry.

HORACE PUTNAM FARNHAM (1918). Mrs. Eliza Cary Farnham in memory of her husband, Dr. Horace Putnam Farnham, A.B. 1843. For the benefit of meritorious students in the Harvard Medical School.

REGINALD FITZ (1954). Scholarships for students in the Harvard Medical School.

DR. E. PEABODY GERRY (1943). The income to aid first year students.

CHARLOTTE GREENE (1925). Edwin Farnham Greene. For a first year student whose previous record indicates special promise.

DR. C. EUGENE GUNTHER (1933). Mrs. C. Eugene Gunther in memory of her husband. To be used to maintain two scholarships for the benefit of deserving medical students.

WILLIAM WAUGH HAGGART (1955). G. Edmund Haggart, M.D. In memory of his brother for scholarships, beneficiary aid or loans.

EDWARD WARREN HARNDEN (1957). William H. Snyder, Jr. and Monica H. Snyder. For scholarships, loans or other financial aid.

DR. CHARLES HARRINGTON (1959). In memory of Dr. Charles Harrington. Beneficiary aid for deserving students.

FAITH GARRISON HARWOOD (1964). Dr. Reed Harwood. Scholarships for any qualified students at the Harvard Medical School.

GEORGE HAVEN (1913). George Haven, M.D. 1883. To be used annually for scholarships for students of the first year in the Medical School.

LEWIS AND HARRIET HAYDEN (1894). Mrs. Harriet Hayden. For colored students. The income may be divided. If not

HARVARD MEDICAL SCHOOL

awarded in the Medical School, the School of Public Health, or the School of Dental Medicine, it is open to colored students in any other department of the University.

FREDERICK WARREN HECKER (1963). Bequest of Eugene A. Hecker in memory of Frederick Warren Hecker. For scholarships to worthy and needy students.

ERNEST LAURENCE HILL (1961). ANNETTE S. HILL. In memory of son — to assist medical students from Maine and New Hampshire.

WILLIAM HILTON (1897). Two scholarships annually in the Medical School.

WILLIAM OTIS JOHNSON (1911). Mrs. William O. Johnson, in memory of her husband, William Otis Johnson, A.B. 1845, M.D. 1848.

CLAUDIUS M. JONES (1893). Claudius Marcellus Jones, A.B. 1866, M.D. 1875.

THOMAS HINCKLEY LANMAN (1961). Established by the Harvard Medical Alumni Council.

FREDERIC T. LEWIS (1965). Bequest of Ethel S. Lewis. Scholarship for a first year student.

ALFRED HOSMER LINDER (1895). Mrs. George Linder. For a student of sound principles and marked ability.

ARTHUR THEODORE LYMAN AND HENRY STURGIS GREW MEMORIAL SCHOLARSHIP (1926). On March 19, 1951, it was voted by the Corporation . . . "to provide that such income shall be available, until further order of this board, for scholarships in the Medical School, the School of Dental Medicine, and the School of Public Health; preference to be given to Chinese students, with the understanding that if none such apply successfully, the income may be used for scholarships for students from elsewhere in the Far East."

SCHOLARSHIPS

GEORGE STURTEVANT MACPHERSON (1965). Estate of Janice M. Blood. Scholarships for deserving students preferably from the State of Maine or from New England.

JAMES EWING MEARS, M.D. (1909). J. Ewing Mears. For a student throughout the full course of four years, subject to his scholastic standing and good conduct.

MEDICAL SCHOOL CLASS OF 1879 (1909). Established by the Class of 1879 as a loan fund and later converted to a scholarship.

JOHN MORGAN MEMORIAL (1961). The Francis Beidler Charitable Trust. For scholarships or other financial aid for students from the State of Illinois.

ERNEST OMAR NAY (1947). Ernest Omar Nay, M.D. 1919. For a medical student from the states of Indiana, Illinois or Ohio whose scholarship is above the average and whose financial resources are such that he cannot unaided acquire a medical education.

JOSEPH PEARSON OLIVER (1904). Patients of Joseph Pearson Oliver, M.D. 1871. To be awarded to a needy and deserving student of the Medical School.

J. ELIOT OVERLANDER (1947). John Eliot Overlander, M.D. 1909. To assist such needy medical students as may be deemed worthy of assistance by the proper authorities.

ALWIN M. PAPPENHEIMER '99 (1957). Beatrice L. Pappenheimer. For the benefit of such graduate students in the fields of medicine or music.

CHARLES B. PORTER (1897). William L. Chase.

DR. FLAVIUS SEARLE (1921). Miss Mary L. Searle, in memory of her father, Dr. Flavius Searle. The stipend may be divided.

JOSEPH J. SILBERT (1937). For scholarship or loans to needy students.

HARVARD MEDICAL SCHOOL

ELEANOR B. AND CHANNING S. SIMMONS (1954). Scholarships for two needy students.

FRANCIS SKINNER (1905). Francis Skinner, Esq. To be used in small sums to meet the urgent needs of meritorious students in the payment of term-bills or other expenses.

CHARLES PRATT STRONG (1894). Friends and patients of the late Charles Pratt Strong, A.B. 1876, M.D. 1881.

ISAAC SWEETSER (1892). Mrs. Anne M. Sweetser. To be "devoted to the aid of poor students of ability who would not otherwise be able to continue the studies necessary for their profession."

EDWARD W. AND ELSIE B. TAYLOR (1961). Katherine B. Taylor. For financial aid to students.

JOHN THOMSON TAYLOR (1899). Mrs. Frederic D. Philips, in memory of her brother, John Thomson Taylor. To be paid to some meritorious undergraduate of the Medical School without regard to his pecuniary circumstances.

MARY THACHER (1956). Mary Thacher. To be applied against the tuition of needy students preferably from first, Yarmouth, Massachusetts, secondly from the Cape Cod region of Massachusetts, and thirdly from Massachusetts.

JAMES ROCKWELL TORBERT (1958). Elizabeth T. Torbert. In memory of her husband James Rockwell Torbert, H.M.S. 1902.

WALKER SCHOLARSHIPS (1922). Miss Leslie Walton Walker, four scholarships.

DR. CHARLES WALKER

HELEN L. WALKER

ANNA G. WALKER

LESLIE W. WALKER

RICHARD H. WALLACE (1960). The family and friends of Richard H. Wallace, H.M.S. 1927.

SCHOLARSHIPS

ABRAHAM A. WATSON (1923). Miss Catherine E. Walker. For the benefit of students in the Medical School.

MAJOR HARRISON BRIGGS WEBSTER, U.S.A. MEMORIAL (1921). Gift of L. Florence Webster in memory of her son, Class of 1905, to sons of members of that class or to a needy student in the Medical School.

CHARLES H. WEED MEMORIAL (1961). Friends, students, and patients of Dr. Weed. For scholarship or other financial aid to students.

DR. CHARLES J. WHITE (1959). Mrs. Bertha Lea Stone, Mr. Charles B. Barnes and Sundry Donors. For scholarship or fellowship or other academic purpose.

EDWARD WIGGLESWORTH (1897). The family of Edward Wigglesworth, A.B. 1861, M.D. 1865.

JAMES F. AND HELENA C. M. WILLIS (1961). Helena C. M. Willis. For a student who is a native of Boston.

GEORGE BERNAYS WISLOCKI (1957). The family and friends of Dr. Wislocki. For one or more graduates or medical students who show unusual promise in some area of the basic medical sciences.

PAUL RICHMOND WITHINGTON, JR. (1960). The family and friends of Paul Richmond Withington, Jr.

S. BURT WOLBACH (1955). Dr. and Mrs. Robert E. Gross.

SCHOOL OF DENTAL MEDICINE SCHOLARSHIPS

The Harvard School of Dental Medicine is fortunate in having financial assistance available to its students. Scholarships are awarded on the basis of academic excellence, financial need or a combination of factors. Application for financial aid may be made at any time to the Associate Dean for Student Affairs of the School of Dental Medicine.

HARVARD MEDICAL SCHOOL

JOANNA ALFORD BEQUEST (1785). Mrs. Joanna Alford. To be used for scholarships for those students who are under low and indigent circumstances.

LAWRENCE WILLS BAKER MEMORIAL FUND (1956). The gift of friends in memory of Dr. Baker, '98, Professor of Orthodontia. A scholarship for a student who has shown aptitude and interest in the field of orthodontics.

DWIGHT M. CLAPP (1926). Clara Josephine Clapp in memory of her husband, Dwight M. Clapp, D.M.D. 1882. For the education of a male student born in Massachusetts, preferably one who has a college education or training of a classical character.

DENTAL SCHOOL ALUMNI SCHOLARSHIP (1937). A gift of the Class of 1912.

THOMAS ALEXANDER FORSYTH (1929). Thomas Alexander Forsyth scholarship to two deserving men, awarded continuously until they have completed the course.

HARVARD DENTAL ALUMNI (1949). Selection of a candidate shall be based upon character, scholarship, and promise within the field of dentistry. The award may be offered as a scholarship to an undergraduate student of the third or fourth year or as a fellowship for graduate work.

HARVARD SCHOOL OF DENTAL MEDICINE NATIONAL SCHOLARSHIP (1960).

As part of the Harvard National Scholarship plan, prize scholarships are awarded to one or more members of each class entering the Harvard School of Dental Medicine. The selection of recipients is based on academic promise without reference to financial need. The amount of the stipend, however, is in proportion to the student's actual necessities, except that a certain minimum award is granted to all prize scholars. Each student accepted by the Committee on Admission is considered as a candidate for a National Scholarship. An individual application cannot be made. The prize scholarship is awarded for one year. If the

SCHOLARSHIPS

student maintains a satisfactory record, the scholarship will be renewed annually.

FRANK RANDALL McCULLAGH (1964). Estate of Frank R. McCullagh. To assist worthy and indigent students to finance themselves through dental training.

EUGENE HANES SMITH (1920). Alumni Association. To be awarded to a third or fourth year student who has been a student in regular standing during the first and second years.

PETER E. STRAUSS (1922). Emily R. M. Strauss. In memory of her husband.

FELLOWSHIPS AND SCHOLARSHIPS AVAILABLE IN OTHER DEPARTMENTS OF THE UNIVERSITY AS WELL AS IN THE MEDICAL SCHOOL AND SCHOOL OF DENTAL MEDICINE

The fellowships, scholarships and loans listed below which are marked with an asterisk (*) give preference to, or are restricted to, students who come within the special terms set forth. Unless otherwise stated, applications should be made, before February 1, to the Deans of the Medical School and School of Dental Medicine.

*JOHN AUSTIN AMORY, CLASS OF 1907, SCHOLARSHIP FUND (1954). Gift of Roger Amory, Class of 1910, to establish "the John Austin Amory, Class of 1907, Scholarship Fund . . . to provide one or more scholarships for candidates for a degree in any college or graduate school of the University." Under certain conditions a grandson by male line of John Austin Amory, '07, may be entitled to the income. If no awards are made to preferential candidates, the income shall be assigned to the College Admission and Scholarship Committee.

ANONYMOUS No. 63 (1961). Anonymous gift "to provide an endowment fund, the income to be used for scholarships to graduates or undergraduates in Harvard University or Radcliffe."

HARVARD MEDICAL SCHOOL

HATTIE G. ATKINS BEQUEST (1961). Residuary bequest of Hattie G. Atkins in memory of her ancestor, Matthew Gannett, the income to be used for not more than two graduate or undergraduate scholarships.

WILLIAM BRIDGMAN ATKINSON '39 MEMORIAL FUND (1952). Anonymous gift "to provide one or more scholarships or beneficiary grants to graduates or undergraduates in Harvard University. These awards shall be based on need and character and not scholarship alone."

EDWARD AUSTIN BEQUEST (1899). For fellowships or scholarships in any department of the University.

JASON S. BAILEY FUND (1952). Residuary bequest of Jason S. Bailey. For scholarships in any department of the University.

FRANK B. BAIRD, JR. FUND (1955). Gift of the Frank B. Baird, Jr. Foundation, to establish the Frank B. Baird, Jr. Scholarship. Income assigned to the Graduate School of Education.

ALBERT M. BARNES MEMORIAL FUND (1959). The income only to be used "for scholarships for students in Harvard University who are worthy recipients of such aid."

ELLEN S. BATES FUND (1929). Residuary bequest of Ellen S. Bates. For scholarships to deserving students in any department of the University. To be awarded every third year, with the next award to be made in 1967.

*BAXENDALE SCHOLARSHIP (1928). Bequest of Esther M. Baxendale. Preference: (1) descendants of Alan Bedford Hudson; (2) students of the name of Baxendale or Hudson; (3) students from Brockton, Mass., or Bourne, Mass. Birth certificate and genealogical record required of (1).

HENRY A. BELCHER FUND (1965). Bequest of Hannah B. Belcher. To establish a fund "to be known as the Henry A. Belcher Fund, the income of which shall be used in providing free scholarships for students of said University as the Trustees or officers thereof may direct."

SCHOLARSHIPS

*FRANK BOAS SCHOLARSHIP FUND (1964). Gift of Mr. and Mrs. Maurits C. Boas, "to establish a graduate scholarship in any one of the graduate schools of Harvard University for one year of study. Nominations shall be submitted by the United States Educational Foundation in Belgium from applicants from Belgium or the Grand Duchy of Luxemburg, and the award shall be made by the appropriate authorities of Harvard University upon the admission of the student to the University. The income of the Fund shall be used as needed to cover all expenses in the United States including tuition. With the approval of the Foundation the award may be renewed for one additional year. In the event the Foundation fails to submit nominations for three years the income of the Fund may be used by Harvard, for financial aid to students from Belgium or the Grand Duchy of Luxemburg."

*BRIGHT LEGACY (1880). Bequest of Jonathan Brown Bright. For descendants of Henry Bright, Jr., of Watertown, Mass., who bear the name of Bright, registered in any department of the University. If no awards are made to preferential candidates, the income shall be assigned to the College Admission and Scholarship Committee. Birth certificate and genealogical record required to establish special claim.

*DANIEL A. BUCKLEY BEQUEST (1905). Bequest of Daniel A. Buckley of Cambridge, Mass. For needy and worthy graduates of Latin, High and other public non-sectarian schools in Cambridge enrolled in any department of the University. Awards to undergraduates will be made by the College Admission and Scholarship Committee.

*GODFREY L. CABOT, INC. SCHOLARSHIP FUND (1955). For scholarships and grants of "aid" to students enrolled in any department of the University. A son of an employee of Godfrey L. Cabot, Inc. or of its subsidiary and associated companies, who applies for aid or a scholarship, may be preferred in the awards from this fund.

JAMES EMERSON CARPENTER FUND (1963). Residuary bequest

HARVARD MEDICAL SCHOOL

of Emmie L. Carpenter "to be devoted annually for deserving and needy students." A portion of this fund has been set aside for use by the University Health Services at the discretion of the Director to assist needy and worthy students meet unusual medical costs.

*MADAME MARGUERITE CARRIÈRE FELLOWSHIP FUND (1959). Residuary bequest of Louis A. Freedman in memory of his wife. The fellowship is to be awarded in alternate years to a graduate student at Harvard University for study in France and to a French graduate student for study at Harvard University. It is hoped that the aim of the American student in France will be to study the French traditions and attitude so as to better understand and explain the French reaction to the problems that concern both countries and that similar aim will guide the French student in America. In 1965-66 this award will be available to a graduate student at Harvard University for study in France.

*VICTOR EMMANUEL CHAPMAN MEMORIAL FELLOWSHIP (1917). Several donors. In memory of Victor Emmanuel Chapman, A.B. 1913, killed in World War I. For a French youth (or youths) for study in any department of the University. Apply through the Institute of International Education, 800 Second Avenue, New York, New York 10017, before February 1. Students already enrolled at Harvard should apply through their Schools.

*JOSEPH HODGES CHOATE MEMORIAL FELLOWSHIP (1919). Gift of the Harvard Club of New York City in memory of Ambassador Joseph Hodges Choate, A.B. 1852. Awarded upon the nomination of the Vice-Chancellor of the University of Cambridge, England, to a British subject coming from that University to study in any department of Harvard University.

*GEORGE CHASE CHRISTIAN MEMORIAL SCHOLARSHIPS (1936). Gift of Carolyn McKnight Christian in memory of her husband, George Chase Christian, A.B. 1895. To be awarded as National Scholarships to residents of Minnesota, for study in any department of the University, preferably the graduate schools.

*MARK D. CORY SCHOLARSHIP (1954). Residuary bequest of

SCHOLARSHIPS

Mark D. Cory. To be awarded to a worthy graduate of the Gadsden High School, Gadsden, Alabama to be selected and designated by the faculty of said high school. Available for students in any department of the University. Administered by the College Admission and Scholarship Committee.

MYER DANA AND ETTA DANA SCHOLARSHIP FUND (1953). Gift of Etta (Mrs. Myer) Dana. To provide scholarships or beneficiary aid to needy and deserving students in the College, Law School, or Medical School. Awards are made upon the recommendation of the Deans of these Schools and not upon application.

FRANK L. DELONG BEQUEST (1964). Residuary bequest of Frank L. DeLong, A.B. 1890, A.M. 1892. The income is to be used for scholarships in Harvard University.

*CHARLES DOWNER SCHOLARSHIP FUND (1927). Bequest of Charles Downer, A.B. 1889, LL.B. 1892. For students in any department of the University in the following order of preference:

- A. Students of "English or Anglo-Saxon stock" who bear the family surname of Downer by right of birth or inheritance, and not because of adoption, preference to be given to such students who are descendants of Joseph and Robert Downer, of Wiltshire, England, who came to America about 1650. Scholarship awards under this category will be sufficient to pay for tuition, books, food, room and other incidentals in any academic year.
- B. Descendants of members of the Harvard College Class of 1889 who are in need of assistance.
- C. Residents of the State of Vermont, preference to be given to those most worthy of assistance.
- D. Students worthy of assistance and of high scholarship, preference to be given to (1) Descendants of graduates of Harvard College, and (2) Those "of that old Anglo-Saxon stock which has gone forth from New England into all parts of the United States and has been the means of giving strength and stability and character to our government."

HARVARD MEDICAL SCHOOL

Or, any balance of income remaining after the award of scholarships as specified in paragraphs A, B and C above may be used for fellowships for Harvard graduates of high scholarship and of rare and unusual ability who are pursuing special work either at Harvard or at any American or foreign university or school.

*DWIGHT D. EISENHOWER SCHOLARSHIP FUND (1962). Gift of William A. Hinton in memory of Augustus and Maria Hinton, "the income to be used to assist graduate students in any department by way of scholarship grants, prizes for scholarly treatises or other achievements, or otherwise."

JOSEPH EVELETH BEQUEST (1896). For needy and worthy students in any department of the University.

BRADLEY FISK SCHOLARSHIP (1963). Gift in memory of Bradley Fisk, the income to be used "to provide one or more scholarships or other forms of financial aid to students in Harvard University."

*THOMAS HOOKER FLINT MEMORIAL SCHOLARSHIP (1957). Established by the friends and family of Thomas Hooker Flint, Harvard College Class of 1958, who died in 1957 in a climbing accident on Mount Madison, in the White Mountains, New Hampshire. The scholarship may be awarded either to students in Harvard College or Harvard Medical School, with preference for graduates of the Belmont Hill School. Thomas Flint was born in Concord, Mass., April 22, 1936, attended Belmont Hill School, and entered Harvard College in the Class of 1958 as an Honorary National Scholar, and hoped to attend Harvard Medical School. The scholarship is established in the conviction that those who benefit from it will fulfill the promise of his short life, as expressed in the closing words of a prayer known to have been Thomas Flint's guide in life: "Help us to make the life of our youth as lovely as the world in which it lives; the brotherliness of humanity equal to the beauty of nature."

FRANCIS LEE FRIEDMAN FUND (1962). Gift of the O-F Foundation, Inc., the income to be used "for scholarships in Physics for undergraduate or graduate students." One third of the income

SCHOLARSHIPS

is to be used for scholarships to undergraduates and two-thirds of the income is to be used for scholarships in the Graduate School of Arts and Sciences. Awards are made upon the recommendation of the Chairman of the Physics Department and not upon application.

GAGE SCHOLARSHIP (1948). Bequest of Homer Gage, A.B. 1882, M.D. 1887. In memory of Thomas H. Gage, M.D. 1852, Homer Gage, 1882, Thomas H. Gage, Jr., 1886, and Homer Gage, Jr., 1918. For students registered in any department of the University.

***JEAN GAILLARD MEMORIAL FELLOWSHIP (1946).** Established in memory of Jean Gaillard, a student of the Ecole Centrale des Arts et Manufactures in Paris, who served as an Aspirant in the French Air Forces, was arrested by the German Gestapo, and died in the German concentration camp at Ravensbrueck April 16, 1945, a victim of Nazi inhumanity. For French youths for study in any department of Harvard University or of the Massachusetts Institute of Technology. The incumbents from year to year are to be nominated by the Board of Directors of the Ecole Centrale des Arts et Manufactures in Paris.

JOHN TYLER HASSAM MEMORIAL SCHOLARSHIP (1941). Bequest of Eleanor Hassam in memory of her father, John Tyler Hassam, A.B. 1863. For students registered in any department of the University.

***LEWIS AND HARRIET HAYDEN SCHOLARSHIP FOR COLORED STUDENTS (1894).** Residuary bequest of Mrs. Harriet Hayden. For needy and worthy colored students in the Medical School, School of Public Health and Dental School; or, if not awarded in these Schools, in any department of the University. Administered by the Medical School.

NATHAN HAYWARD MEMORIAL SCHOLARSHIP FUND (1956). Gift of Anna S. (Mrs. Nathan) Hayward in memory of her husband. For Nathan Hayward Scholarships or aid to students in any department of the University.

HARVARD MEDICAL SCHOOL

*CHARLES W. HOLTZER FELLOWSHIPS (1929). Bequest of Charles W. Holtzer. For young men of German birth who have received their preliminary education in German institutions of learning, to study in any department of the University. Preference is given to students in Germany at the time of application. Students in Germany may apply either through the Deutscher Akademischer Austauschdienst, Nassestrasse 11, Bonn, or the Institute of International Education, 800 Second Avenue, New York, New York 10017, before February 1. Students enrolled at Harvard should apply through their Schools. Documentary proof of German birth and education required.

EDWARD WILLIAM HOOPER MEMORIAL (1905). The gift of friends of Edward W. Hooper, A.B., 1859, LL.B. 1861. For one or more fellowships in any department of the University.

CHARLES LLOYD HUFF SCHOLARSHIP FUND (1949). Residuary bequest of Anna Elizabeth (Mrs. Charles Lloyd) Huff, in memory of Charles Lloyd Huff, A.B. 1913. Income assigned to the College Admission and Scholarship Committee.

SINCLAIR KENNEDY FUND (1948). Gift of Mrs. Rae B. Kennedy in memory of her husband, Sinclair Kennedy, A.B. 1897, LL.B. 1906. For grants to students enrolled in any of the graduate departments of the University for travel and residence outside the United States. "This fund to provide grants for travel is created in the belief that an opportunity to observe and to compare, to seek meanings and reasons, may enlarge the understanding of the traveller and, through him, be of general value." Not open to competition by undergraduates, including graduating seniors, in the College. Recommendations for Kennedy Fellowships are made on behalf of students by the Deans or Chairmen of the Departments in which the student is registered. In addition, at least two letters of recommendation from the student's instructors, and a somewhat detailed statement of purpose written by the candidate, must be submitted on his behalf. All material is then forwarded to the General Scholarship Committee Office, 906 Holyoke Center, Cambridge, before February 1.

SCHOLARSHIPS

ARTHUR EDWIN KENNELLY MEMORIAL FUND (1964). Bequest of Reginald Grice Kennelly in memory of his father, Arthur Edwin Kennelly. For students in any department of the University, but preferably for undergraduates.

*FRANK KNOX MEMORIAL (1946). Gift of Annie Reed Knox in memory of her husband, Col. Frank Knox, LL.D. (Hon.) 1942, Secretary of the Navy, 1940-44. "It is my hope that this fund . . . will play a part in an integrated program of exchange fellowships throughout the world. The Frank Knox Memorial is established because of the firm belief of my dear husband, a conviction which I share, that cooperation between the British Commonwealth and the United States of America, based upon an informed and understanding contact of the peoples of these two great countries, is an essential to international peace." Candidates shall be selected on the basis of future promise of leadership, strength of character, keen mind, a balanced judgment and a devotion to the democratic ideal. Fellowships are to be awarded annually to:

1. Students coming from the following British Commonwealth countries: the United Kingdom, Australia, New Zealand, Canada and Newfoundland. Students should apply through their university before November 1 of the year preceding award.
2. Recent graduates of Harvard College, or students who have completed at least one year of study in one of the Harvard graduate schools, for study in any one of the countries listed above.

Procedure for graduate students for travel grants only. Recommendations for Knox Fellowships are made on behalf of students by the Deans or Chairmen of the Departments in which the student is registered. In addition, at least two letters of recommendation from the student's instructors, and a somewhat detailed statement of purpose written by the candidate, must be submitted on his behalf. All material is then forwarded to the General

HARVARD MEDICAL SCHOOL

Scholarship Committee Office, 906 Holyoke Center, Cambridge, before February 1.

Procedure for College students (graduating seniors only) for travel grants only. Recommendations for Knox Fellowships are made on behalf of students by their Department Chairmen and House Masters or Senior Tutors. Application material is due March 1 in the Office of the Dean of the College, 4 University Hall, Cambridge. Nominees are selected by informal interviewing committees.

*ARTHUR LEHMAN FUND (1936). Gift of Adele L. (Mrs. Arthur) Lehman and her daughters and sons-in-law, Mr. and Mrs. Richard J. Bernhard, Mr. and Mrs. Benjamin J. Bittenwieser and Mr. and Mrs. John L. Loeb, in memory of Arthur Lehman, A.B. 1894. For Arthur Lehman Fellowships to be awarded along the general lines of the Harvard National Scholarship Plan. For students of exceptional merit and promise in the graduate and professional schools only of the University, preference to be given to the following: Graduate School of Arts and Sciences, Graduate School of Design, Graduate School of Education, Medical School, and Graduate School of Public Administration.

HORACE LOUIS LEITER MEMORIAL SCHOLARSHIP (1955). Bequest of Marietta D. Leiter in memory of her husband, Dr. Horace Louis Leiter, A.B. 1899. For deserving students in any department of the University.

GEORGE VASMER LEVERETT SCHOLARSHIP (1958). Residuary bequest of George Vasmer Leverett of the Class of 1867. To "establish new scholarships or fellowships."

*LINCOLN SCHOLARSHIP (1876). Residuary bequest of Miss Levina Hoar. Preference for needy and worthy students from Lincoln, Mass. If there are no such applicants, the income is assigned to the College Admission and Scholarship Committee for award to undergraduates.

CHARLES R. LOWELL AND ANNA L. LOWELL SCHOLARSHIP (1949). Residuary bequest of Anna L. (Mrs. Henry E.) Woodbury for

SCHOLARSHIPS

the establishment of two scholarships, to be known as "The Charles R. Lowell and Anna L. Lowell Scholarship" and "The James J. Lowell and Anna L. Woodbury Scholarship" for "worthy, deserving and indigent young men who may be shown to be unable to pay their tuition." Available for award in any department of the University. Income assigned to the College Admission and Scholarship Committee.

JAMES J. LOWELL AND ANNA L. WOODBURY SCHOLARSHIP (1949). Residuary bequest of Anna L. (Mrs. Henry E.) Woodbury, *see above*. Income assigned to the College Admission and Scholarship Committee.

FRANCES E. MARKOE RESIDUARY BEQUEST (1944). Residuary bequest of Frances E. (Mrs. Harry) Markoe for the establishment of scholarships for students in any department of the University.

*ALWIN M. PAPPENHEIMER '99 FUND (1957). Bequest of Beatrice L. (Mrs. Alwin M.) Pappenheimer, in memory of her husband; "the income therefrom to be used for any kind of financial assistance, whether for tuition, books, necessary maintenance and support or otherwise, to graduate students in the College or in any graduate school of the University, suggesting, but not binding the President and Fellows of Harvard College hereby, that the said income be preferably used for the benefit of such graduate students in the fields of medicine or music." The income is allocated equally between the Medical School and Graduate School of Arts and Sciences. Awards made by the scholarship committees of those schools.

JOHN PARKER BEQUEST (1873). Bequest of John Parker for fellowships to further the scientific education either abroad or in the United States (including Harvard University) of exceptionally talented graduate students devoting themselves to the study of one of the natural sciences. Not open to competition by undergraduates, including graduating seniors, in the College. Candidates from the following areas are considered: Divisions of Engineering and Applied Physics (if candidate's field is concerned

HARVARD MEDICAL SCHOOL

with a natural science), Geological Sciences and Medical Sciences; Departments of Astronomy, Biology, Chemistry and Physics. Recommendations for Parker Fellowships are made on behalf of students by the Chairmen of the Divisions and Departments listed above. In addition, at least two letters of recommendation from the student's instructors, and a somewhat detailed statement of purpose written by the candidate, must be submitted on his behalf. All material is then forwarded to the General Scholarship Committee Office, 906 Holyoke Center, Cambridge, before February 1.

*FREDERICK E. PARLIN FUND (1928). Bequest of Albert Norton Parlin. For needy and worthy students in any department of the University, preference to be given to natives of Malden or Everett, Mass. Evidence that applicant is a native of either Malden or Everett should accompany application of student seeking to establish preferential claim.

*WILLIAM PENNOYER BEQUEST (1670). Bequest of William Pennoyer of England, for two fellows and two scholars; one preferably to be a descendant of Robert Pennoyer (a brother of William) and the other . . . [from] . . . New Haven [Colony]. Preference to be given to undergraduate descendants. Pennoyer descendants in the graduate schools may apply for the Pennoyer Scholarship by filing such application directly with the College Admission and Scholarship Committee. Certified genealogical records required to establish claim.

*ARISTIDES EVANGELUS PHOUTRIDES MEMORIAL (1925). Gift of friends of Aristides Evangelus Phoutrides, A.B. 1911, Ph.D. 1915, to provide a scholarship in his memory for a student of Greek birth or of Greek parentage in any department of the University. Documentary evidence of Greek birth or parentage required of applicants.

*PRINCETON FELLOWSHIP (1910). Gift of Cleveland H. Dodge. To be awarded to a graduate of Princeton University, for his first year of study only, in one of the graduate departments of

SCHOLARSHIPS

Harvard University. Applications should be made to the Dean of the Graduate School of Princeton University before January 20.

*LEON W. REDPATH SCHOLARSHIP (1938). Bequest of Eliza Allen (Mrs. Ellis W.) Redpath in memory of her son Leon W. Redpath, A.B. 1898. For deserving students from the State of Ohio, registered in any department of the University, with preference to residents of Stark and Tuscarawas Counties.

*FRANKLIN REYNOLDS FUND (1925). Residuary bequest of John F. Reynolds. For students in any department of Harvard University and Radcliffe College who are natives of Marblehead, Mass. Application should be accompanied by evidence that applicant is a native of Marblehead.

*JAMES A. RUMRILL SCHOLARSHIPS (1909). Gift of Anna Chapin (Mrs. James A.) Rumrill in memory of her husband James Augustus Rumrill, A.B. 1859, to establish three scholarships, two of which are available to graduates of secondary schools in Virginia, North and South Carolina, Florida, Georgia, Tennessee and Kentucky, for their first year of residence as undergraduates in Harvard College. The third scholarship is for a graduate of a college or university in any of the above-named states for study in his first year of residence in any graduate department of Harvard University. These scholarships are not renewable. In the absence of properly qualified candidates from the above-named states, the scholarships may be thrown into general competition, as two undergraduate scholarships and one graduate scholarship. Entering students in the College apply to the College Admission and Scholarship Committee; entering students in the graduate departments apply through the Deans' Offices of their Schools.

ARTHUR SACHS SCHOLARSHIP AND FINANCIAL AID FUND (1958). Gift of Arthur Sachs, Class of 1901, of Paris. "To make an enduring contribution to the relations between the two countries (the United States and France), by enabling an increasing number of the most deserving and able students in France to study in the

HARVARD MEDICAL SCHOOL

United States.” The income of this fund will “provide financial assistance for French students enrolled or to be enrolled” in Harvard University. Nominations are made by the Sachs Scholarship Committee in Paris. Inquiries from French students should be addressed to Cultural Attaché, United States Information Service, 4 avenue Gabriel, Paris 8^e, France.

*PETER BROOKS SALTONSTALL '43 MEMORIAL (1947). Gift of the family of Peter Brooks Saltonstall, 1943, who was killed in action on the Island of Guam on August 13, 1944. Peter B. Saltonstall was the son of Leverett Saltonstall, A.B. 1914, LL.B. 1917, United States Senator from Massachusetts and formerly Governor of Massachusetts. To further the education, the health and welfare of the peoples inhabiting the Hawaiian Islands and those islands west of Hawaii, including New Zealand, the Fiji Islands and Australia and also Japan, South Korea, Hong Kong, Formosa, the Philippine Islands, Vietnam, the East Indies, Indonesian Islands, Sumatra and Thailand. The first preference is that the income of this fund be used for scholarships or fellowships to assist worthy students from the above-named Pacific regions to gain a better education at Harvard University. The stipend shall be set to supplement the holder's income sufficiently to defray all his basic expenses of tuition, board and room, and in certain instances some travel allowance may be included. Students may apply directly to Harvard or through the Institute of International Education, 800 Second Avenue, New York, New York 10017, before February 1. Students already enrolled at Harvard should apply through their Schools.

In the event that no suitable candidate for the scholarship appears, the unexpended income and its accumulation shall be available for the support of research to better the living conditions or the general well-being of the peoples in the Pacific region described above, such research grants to be made by vote of the Corporation on the recommendation of the Dean of the Faculty of Arts and Sciences.

CHARLES N. SHAW FUND (1960). Bequest of Charles Nason

SCHOLARSHIPS

Shaw. For the support of needy and deserving students in any department of the University.

FREDERICK SHELDON FUND (1909). Residuary bequest of Amey Richmond (Mrs. Frederick) Sheldon, in memory of her husband. The income of this Fund is "to be applied . . . to the further education of students of promise and standing in the University by providing them with facilities for further education by travel after graduation or by establishing travelling scholarships."

Every holder of a Sheldon Fellowship, or Sheldon Prize Fellowship, must be a member of the University at the time of his appointment and must hold a Harvard degree, or be a candidate for a degree in June of the year of appointment.

Procedure for graduate students. Recommendations for Sheldon Fellowships are made on behalf of students by the Deans or Chairmen of the Departments in which the student is registered. In addition, at least two letters of recommendation from the student's instructors, and a somewhat detailed statement of purpose written by the candidate, must be submitted on his behalf. All material is then forwarded to the General Scholarship Committee Office, 906 Holyoke Center, Cambridge, Massachusetts 02138, before February 1. Holders may enroll at universities in this country — outside Harvard University — or abroad, for purposes of formal study or research, or they may engage in travel, or they may combine travel and study.

***ERNEST FREDERICK SLATER SCHOLARSHIP (1955).** Bequest of Ernest F. Slater. The income to be awarded as scholarships in any department of the University to deserving (financially or otherwise) young men who are residents of (a) the City of Orangeburg, South Carolina; (b) the State of South Carolina; preference to be given to descendants by birth or adoption of Edward Frederick Slater, father of the donor, regardless of their residence. Not open to students in their first year at the University.

***CHARLES H. SMITH BEQUEST (1947).** Residuary bequest of Charles H. Smith. For awards to students in any department of the University according to the following order of preference:

HARVARD MEDICAL SCHOOL

1. a. Graduates of public high schools in Providence, Rhode Island, who are of scholarship rank.
b. Graduates of public high schools in Providence, Rhode Island, who are below scholarship rank but who are considered eligible for financial aid.
2. Graduates of other (non-public) secondary schools in Providence, Rhode Island, who are of scholarship rank.
3. Any residents of Rhode Island not indicated above who are of scholarship rank.

CHARLES HAROLD STANTON SCHOLARSHIP (1963). Bequest of Katharine Stanton "the income only to be used to provide a scholarship in memory of my nephew."

*WILLIAM STOUGHTON BEQUEST (1701). Bequest of Lieutenant Governor William Stoughton, A.B. 1650. For awards to students in any department of the University according to the following order of preference: (a) Residents of Dorchester or Mattapan, Mass.; (b) Residents of Milton, Mass.; (c) Any needy and deserving students.

JOHN E. THAYER SCHOLARSHIPS (1857). Bequest of John E. Thayer, the income to be paid "to the ten most meritorious scholars in Harvard University in Cambridge every year . . . the income shall only be paid to such meritorious scholars as who may actually need the same."

*AUGUSTUS CLIFFORD TOWER FELLOWSHIP FUND (1927). Gift of Louise G. (Mrs. Augustus Clifford) Tower for two fellowships to be awarded annually to:

1. A graduate of Harvard College who may be either a graduating senior or a student enrolled in one of the graduate departments of the University, for study in a French university, preference to be given to a student of Anglo-Saxon descent. Graduating seniors should consult their Department Chairmen, House Masters, or Senior Tutors with regard to the application procedure. Graduate students should consult their Deans or De-

SCHOLARSHIPS

partment Chairmen. Nomination, on the basis of application material and interview, is made by a special selection committee to the Committee on General Scholarships.

2. A French student for study in any graduate department of Harvard University. French students should apply through the Directeur, École Normale Supérieure, 45 rue d'Ulm, Paris 5^e, France, early in January.

In addition to the above fellowships, a sum from the Tower Fund is set aside annually for a travel grant to either a graduating senior or a student enrolled in one of the graduate departments of the University, who is nominated by a special selection committee to attend the École Normale Supérieure in Paris, on a fellowship provided by the French Government. Candidates should be United States citizens. For application procedure see paragraph 1 above.

UNIVERSITY GENERAL SCHOLARSHIP FUND (1951). Established by the President and Fellows of Harvard College. For scholarships to students in any School or department of Harvard University.

*THOMAS E. UPHAM CLASS OF 1868 FUND (1939). Bequest of Marcella B. Upham. May be granted annually to worthy graduates of Harvard College in any department of the University who are "preparing to serve our country in public offices of trust and responsibility in the gift of the people, students of American parentage descended from the early settlers to be chosen in preference to others, provided they are equally worthy of assistance."

VARIELL SCHOLARSHIP (1961). Bequest of Katharine S. Variell in memory of Montfort Schley Variell, the income to be used for music students particularly interested in the piano. Awards are made upon the recommendation of the Chairman of the Music Department and not upon application.

*ANNA VAUGHN FOUNDATION (1935). Residuary bequest of John Vaughn, A.B. 1879. For "meritorious students of Harvard University who are pursuing studies in any biological science."

HARVARD MEDICAL SCHOOL

EMANUEL L. VERVEER BEQUEST (1963). Bequest of Emanuel L. Verveer, S.B. 1898, "the income only to be used to aid financially deserving students, irrespective of race, creed or color."

SARAH L. VIEHMANN SCHOLARSHIP (1936). Gift of Henry Bluestone, A.B. 1906, in memory of his mother, Sarah L. Viehmann. For deserving students in the College or graduate departments of the University.

THE BENJAMIN WEAVER FUND (1961). Residuary bequest of Wealthy M. Weaver in memory of her son Benjamin Weaver, A.B. 1889, the income to be used for scholarships to students in any department of the University.

*JENS AUBREY WESTENGARD FUND (1954). Bequest of Rebecca Aubrey Westengard. "The income is to be applied . . . to the further education of students of promise and standing in any department of the University by providing them with facilities for further education in Europe, Britain, or South America, by travel or study, or to the further education of students of promise and standing in any of those countries, by providing them with facilities for further education by travel and study in this country, preferably by study in some department of Harvard University." Students enrolled in, or expecting to enroll in, the Law School should ordinarily apply for the Jens Iverson Westengard Fund administered by that School.

JAMES K. WHITTEMORE FUND (1963). Residuary Bequest of Francis Lee Whittemore "the income only is to be used to provide one or more scholarships in Mathematics for undergraduates in Harvard College and students in the Graduate School of Arts and Sciences." One third of the income is to be used for scholarships to undergraduates and two thirds of the income is to be used for scholarships in the Graduate School of Arts and Sciences. Awards are made upon recommendation of the Chairman of the Mathematics Department and not upon application.

*1902 WORLD WAR MEMORIAL SCHOLARSHIP (1923). Gift of the Class of 1902 in memory of their classmates, André Chéronnet-

LOAN FUNDS

Champollion, Edward Ball Cole and Elbert Walker Shirk, and to be awarded by preference to: (1) deserving sons of 1902 men killed in World War I; (2) deserving descendants of members of the Class of 1902. Open to students in any department of the University, with preference to undergraduates. If no awards are made to preferential candidates, the income shall be assigned to the College Admission and Scholarship Committee.

*JEFFRIES WYMAN SCHOLARSHIPS (1924). Bequest of Mary Wyman Davis in the name of Susan Wyman and Mary Wyman Davis. For one or more students in any graduate department of the University "who may have given promise of success in some branch of Biological Research," preference to be given to students of anatomy. Nominations are made before March 1 to the Committee on General Scholarships by a committee consisting of the Hersey Professor of Anatomy, the James Stillman Professor of Comparative Anatomy and the Director of the Museum of Comparative Zoölogy.

LOAN FUNDS

Ample loan funds are available for students in need of financial assistance.

Loans are usually made to meet term bills; cash is provided rarely. Short-term loans, for a period of less than six months, are available under special circumstances. In emergencies, loans may be made at any time.

Loans are available for students from Medical School funds as well as from funds allocated to the School under the Health Professions Educational Assistance Act. The interest and terms of repayment are the same on all loans regardless of source.

Loans shall bear no interest until the July 1 three years after the borrower's graduation from the school. Thereafter, loans shall bear interest at the "going Federal rate" in effect at the time the initial loan was made. For the fiscal year, 1965-66, this rate

HARVARD MEDICAL SCHOOL

has been set at $4\frac{1}{4}$ per cent. Any change in the rate will be announced annually on or before July 1.

The principal and interest are to be repaid over the ten-year period that begins three years after graduation from the School. The period of payment may be deferred for three years of military service and/or three years in the Peace Corps.

Payment may be made in equal or graduated installments with the right of the borrower to accelerate payments.

If the student borrower leaves the School prior to graduation, the interest on his loan shall begin to accrue on the date of his separation from the School.

Applications for loans should be made to the Associate Dean for Student Affairs.

MEDICAL SCHOOL

FRANK W. AND CARL S. ADAMS MEMORIAL LOAN FUND (1955). Established by the Charles E. and Caroline J. Adams Trust as a revolving loan fund.

DEXTER FUND (1963). An anonymous gift to provide loans for any qualified student engaged in studies under the academic jurisdiction of the Faculty of Medicine.

DAVID L. EDSALL REVOLVING LOAN FUND (1928). Dr. Frederick C. Shattuck established this fund by gift of \$100,000 to be used as a revolving loan fund.

CHARLES WILLIAM ELIOT LOAN FUND (1924). Given anonymously in honor of President Eliot. Principal and interest to be used for loans to students in the Medical School.

HARVARD MEDICAL SCHOOL LOAN (1954).

HARVARD WAR LOAN (1920).

HEALTH PROFESSIONS STUDENT LOAN FUND. Department of Health, Education and Welfare (Public Health Service) under the Health Professions Educational Assistance Act.

LOAN FUNDS

HARRIET P. KEITH LOAN (1921).

GEORGE B. AND LOUISE KERPER FUND (1956). Established by Edmund Kerper as a revolving loan fund in memory of George B. and Louise Kerper.

GEORGE W. MERCK MEMORIAL FUND (1959). Established by the Merck Company Foundation as a revolving loan fund to assist fourth year students in financing their internships.

FRANCIS I. PROCTOR AID FUND (1942).

JAMES HENRY RAND FUND (1962). Public Health Foundation for Cancer and Blood Pressure Research, Inc. To provide scholarships, loans, or other kinds of beneficial aid for any student who has received his M.D. degree at the Harvard Medical School.

SCHOOL OF DENTAL MEDICINE

Loan funds are available to all students who show suitable need and whose other financial obligations do not make it improbable that a loan will be repaid. Terms of loans are identical with terms for Medical School loans.

AMERICAN DENTAL ASSOCIATION — FUND FOR DENTAL EDUCATION DENTAL STUDENT LOAN FUND (1962). Gift of the Fund for Dental Education, Inc.

THE CHRISTIAN SOLDIER FUND (1925). Established by Miss Caroline F. Anderson for promising dental students. The loan carries no interest but the recipient must sign a note obligating him to repay the loan not later than five years from the date of the note.

DENTAL ALUMNI LOAN FUND (1927). Established and maintained by the Dental Alumni Association for financial aid to worthy students.

LUCINDA DAVIS FERNALD FUND (1936). A small fund, the gift of Adelbert Fernald, D.M.D. 1896, to be loaned to deserving New England-born students of good character.

HARVARD MEDICAL SCHOOL

HEALTH PROFESSIONS STUDENT LOAN FUND. Department of Health, Education and Welfare (Public Health Service) under the Health Professions Educational Assistance Act.

INTERNATIONAL COLLEGE OF DENTISTS STUDENT LOAN FUND (1962). The gift of the International College of Dentists for a revolving loan fund available only to senior students.

ROBERT T. MOFFATT FUND (1925). A small fund from various contributors in memory of Robert T. Moffatt, D.M.D. 1895, for the benefit of needy and deserving students.

SCHOOL OF DENTAL MEDICINE REVOLVING LOAN FUND (1952). Recognizing the need for student loan money in the School, the President and Fellows of Harvard College authorized an appropriation to establish this fund.

SCHOOL OF DENTAL MEDICINE LOAN FUND (1953). An appropriation from the School's funds to establish additional loan money for needy students.

BENEFICIARY AND LOAN FUNDS AVAILABLE IN OTHER DEPARTMENTS OF THE UNIVERSITY AS WELL AS IN THE MEDICAL SCHOOL AND SCHOOL OF DENTAL MEDICINE

BENEFICIARY FUNDS

*CHARLES WILLIAM ELIOT FUND (1926). Established by the alumni in honor of Charles William Eliot on the occasion of Mr. Eliot's resignation as President and in recognition of his forty years of service. The income is to be divided between (a) grants of aid to descendants in the direct line of Mr. Eliot who need financial assistance and who are enrolled in any department of the University or in Radcliffe College, and (b) the support of instruction and research in Landscape Architecture.

*CALVIN AND LUCY ELLIS AID (1899). Bequest of Calvin Ellis, A.B. 1846, M.D. 1849, supplemented by a residuary bequest under the will of his sister, Miss Lucy Ellis. To pay the fees of tui-

LOAN FUNDS

tion and instruction, the cost of text-books, room-rent and reasonable board, of such descendants of David Ellis and Beulah Newell, formerly of Dedham, Mass. and John Ellis and Hannah Ellis, formerly of Walpole, Mass., as may be students in any department of Harvard University. Birth certificate and proof of descent from Ellis family required.

HARRISON-DARLING-JENKS MEMORIAL FUND (1935). Bequest of Miss Laura Darling Jenks. For aiding students in attaining an education at Harvard University. Income assigned to the College Admission and Scholarship Committee.

LOAN FUNDS

The following Loan Funds are to be used for students in any department of the University. Students apply through their own Deans. Loans are made according to the terms ordinarily applied by the individual Schools. Applications may be obtained from the several Deans' Offices or from the General Scholarship Office, 906 Holyoke Center, Cambridge.

*JOHN W. APPEL LOAN FUND (1919). Restricted to descendants of John W. Appel of Lancaster, Pennsylvania, or their appointees.

FRANK GAYLORD COOK LOAN FUND (1951).

*THE HARVARD CLUB OF WASHINGTON, D.C., LOAN FUND (1957). Preference for students resident in the Washington, D.C. area.

*NEW CENTURY CLUB OF BOSTON LOAN FUND (1926). Preferably for men pursuing courses of study in Hebraic literature, culture and philosophy.

JESSIE SMITH NOYES FOUNDATION, INC. LOAN FUND (1960). To establish a revolving loan fund.

NELSON ROBINSON, JR. LOAN FUND (1941).

JAMES G. RODGER LOAN FUND (1883).

WILLIAMS FUND (1942).

HARVARD MEDICAL SCHOOL

PRIZES

MEDICAL SCHOOL

ISAAC ADLER (1934). Frida Adler. To be awarded once in three years for the best piece of original research within that period in the United States or Canada on any subject within the medical or allied sciences.

BORDEN UNDERGRADUATE RESEARCH AWARD. Awarded to a member of the graduating class who, during any year while enrolled in the School, has carried out undergraduate research having originality and thoroughness.

HARVARD MEDICAL ALUMNI ASSOCIATION PRIZE. To be awarded each year to the Permanent President of the Graduating Class. It has three purposes: to extend a greeting from the old Alumni to the new, to accord respect to the graduating class by honoring its chosen leader, to select for honor a man with whom long and cordial association is confidently anticipated.

HENRY ASBURY CHRISTIAN (1937). Dr. Samuel A. Levine. To be awarded annually on or about the seventeenth of February, which is Dr. Christian's birthday, to the student in the Fourth Year Class who has displayed diligence and notable scholarship in his studies and offers promise for the future.

LEON REZNICK MEMORIAL PRIZE (1958). To be awarded to a fourth year student who has shown excellence and accomplishment in research conducted during his period of study at the Harvard Medical School. Candidates for the award must submit a typewritten paper to the Dean's Office by April 1.

JAMES TOLBERT SHIPLEY PRIZE (1952). Harriet S. Parker. Awarded as a prize for research carried out by a medical student, the results of which have been published or accepted for publication. Candidates for the award must submit papers to the Dean's Office by April 1.

SOMA WEISS AWARD. Awarded each year at the Undergraduate Assembly (see page 95).

LECTURESHIPS

SCHOOL OF DENTAL MEDICINE

HARVARD DENTAL ALUMNI MEDALS (1953). The Harvard Dental Alumni Association awards its gold and silver medals annually for all-around scholastic excellence.

HARVARD ODONTOLOGICAL SOCIETY (1949). The Harvard Odontological Society each year presents a Certificate of Merit to the best Senior Seminar Essayist of that year. This senior is selected by the Awards Committee of the School of Dental Medicine.

DR. GRACE MILLIKEN (1950). An award given annually when practicable, but at least once in three years, for an outstanding essay on the general subject of dental health.

LECTURESHIPS

JOHN ADAMS LECTURESHIP ON DERMATOLOGY. The income of the fund to be expended in support of one or more lectures in dermatology in any given academic year.

THE EDWARD K. DUNHAM LECTURES for the promotion of the medical sciences have been given annually since 1923 by eminent investigators and teachers in one of the branches of the medical sciences or of the basic sciences which contribute toward the advance of medical science in the broadest sense. The lectures are open to the Faculty and students of the Harvard Medical School and College and all other interested professional persons. The lectures are given under the fund established for that purpose by Mary Dows Dunham in memory of her husband, Dr. Edward K. Dunham.

LAURENCE B. ELLIS LECTURE. Established by the students, associates, and friends of Dr. Ellis. To invite annually a visiting lecturer of distinction in the general field of cardiovascular physiology and disease to visit the Harvard Medical Unit at Boston City Hospital and to give a lecture during this visit to be open to the public.

HARVARD MEDICAL SCHOOL

THE GEORGE W. GAY LECTURES UPON MEDICAL ETHICS are given annually at the Harvard Medical School. The fund for the establishment of these lectures was given in 1917 by Dr. George W. Gay.

THE J. HOWARD MUELLER LECTURES are given annually at the Harvard Medical School. The fund for the establishment of these lectures was established in 1958 to honor the late J. Howard Mueller, Charles Wilder Professor of Bacteriology and Immunology.

THE ALPHA OMEGA LECTURER is to be nominated each year by the Alpha Omega Alpha Society. The honorarium and expenses of the lectureship to be supported from the fund established by the Society in 1952.

THE HANNS SACHS LECTURES in the field of Freudian psychoanalysis are supported by a gift in memory of Dr. Sachs. One or more may be given in any year.

THE DR. ANDREW YEOMANS LECTURESHIP FUND has been established by members of the Class of 1934 and the Class of 1935 and friends in memory of Dr. Yeomans. Lectures are to be given annually and the lecturer will be chosen from young clinicians in the fields of clinical research by a committee named by the donors.

THE CANCER COMMISSION OF HARVARD UNIVERSITY

Under the will of the late Mrs. Caroline Brewer Croft a sum of money was received in 1899 for the investigation of the cause and treatment of cancer. Since that time other sums have been contributed for cancer research and the Cancer Commission of Harvard University has been organized.

The Commission supports the Huntington Hospital beds, outpatient department, and cancer research laboratories at the

RESEARCH FUNDS

Massachusetts General Hospital. It provides a service for pathological diagnosis of tumor tissue for the State of Massachusetts. This service was transferred in 1951 from the buildings of the Harvard Medical School to the Cancer Research Institute of the New England Deaconess Hospital. The service is carried on in part in a special laboratory at the Lemuel Shattuck Hospital, in part in laboratories at the Cancer Research Institute of the New England Deaconess Hospital.

The functions of the Cancer Commission are exercised by the Committee on Research and Development which is made up of the following members: Nathan Marsh Pusey, *Chairman*; Harvey Brooks, Robert Higgins Ebert, Franklin Lewis Ford, Roy Orval Greep, James Robbins Reynolds, Theodore Ryland Sizer, John Crayton Snyder, Lewis Gard Wiggins, Henry Coe Meadow, *Executive Secretary*.

RESEARCH FUNDS

Application for support of investigations falling within the scope of any of the following research funds should be sent to the Chairman of the Committee or to the Dean.

REAR ADMIRAL W. L. CAPPS FUND

In 1949 a bequest was received from Edna Ward Capps to be known as the Rear Admiral W. L. Capps Fund, the income from which, under certain circumstances, to be used broadly for the cure and treatment of persons afflicted with diabetes. George W. Thorn, M.D., is Chairman of the Committee administering the income from this fund.

PROCTOR FUND

A bequest of fifty thousand dollars by Ellen Osborne Proctor, for the purpose of promoting the study of chronic diseases,

HARVARD MEDICAL SCHOOL

subsequently has been increased by an additional fifty thousand dollars from another member of the Proctor family. The income of this fund is to be devoted to investigations into the nature and treatment of chronic diseases and the care of persons afflicted with these diseases while in hospitals for such investigations. Arthur T. Hertig, M.D., is Chairman of the Committee administering the income from this fund.

WILLIAM W. WELLINGTON FUND

In 1925 a bequest was received from William H. Wellington to establish the "William W. Wellington Memorial Research Fund." The income of this fund is to be applied for research concerning the etiology and therapeutics of the diseases of man. Arthur T. Hertig, M.D., is Chairman of the Committee administering the income from this fund.

OPPORTUNITIES FOR RESEARCH

The laboratories of the Medical School and its associated hospitals provide exceptionally rich opportunities for each medical student to participate in a research program in the field of his special interest. The wide variety of investigations underway in basic and clinical sciences assures each student of the facilities to learn special techniques and to pursue an investigation of his choice.

Each medical student is encouraged to devote some of the free time during the school year and the summer months to a research program. Exceptional students may be permitted to withdraw from medical school for a year to devote full time to research. Any student in good academic standing and who has shown promise in research may devote the entire Elective Period to research at the discretion of the Administrative Board. A considerable number of fellowships are available for the support of students engaged in summer and part-time research.

PLAN OF INSTRUCTION

Any student interested in undertaking research is urged to discuss his program with the Associate Dean for Student Affairs or one of the Honors Tutors.

THE UNDERGRADUATE ASSEMBLY

The Undergraduate Assembly, held late in the spring of each year under student auspices, provides an opportunity for students from all classes to present formally the results of their investigations to the students and Faculty of the Medical School. The Soma Weiss Award is made at this meeting.

GENERAL PLAN OF INSTRUCTION

On the following pages will be found a brief description of the plan of instruction for the four years of Medical School, followed by a statement of the general plan of instruction offered by each Department. A diagrammatic summary of the medical curriculum will be found on pages 100 and 101.

GENERAL PLAN OF THE FIRST TWO YEARS

In general, during the first semester of each of the first two years, individual departments introduce selected material characteristic of their particular disciplines. In the second semester of each year, the departments collaborate in the presentation of a unified approach to various problems of human biology.

In the first year, the first semester is devoted to a study of gross anatomy, an introduction to histology and cytology, and to the fundamentals of physiology and biochemistry. During the second semester, the anatomy (macro- and micro-), physiology and biochemistry relevant to studies of the body fluids, respiration, the liver and the kidney, and the nervous, gastrointestinal and endocrine systems is presented in an interdepartmental frame-

HARVARD MEDICAL SCHOOL

work. Three additional exercises complete the material of the first year. Voluntary clinics designed to indicate the application of the basic medical sciences to understanding disease in man are presented at roughly weekly intervals throughout the year. During the first semester a series of lectures covering elements of embryology is given. In the second semester, a course in Psychic Growth and Development, introducing aspects of normal psychological development in man, and a course in Biostatistics complete the program.

In the first semester of the second year, the Departments of Bacteriology, Pathology and Pharmacology offer courses in their respective disciplines. A number of correlated interdepartmental exercises are also included. The last portion of the semester is devoted to chemotherapy taught jointly by the Departments of Bacteriology and Pharmacology.

During the second semester a correlated program in pathologic physiology is given. Mechanisms of disease are presented in a unified course by members of the Departments of Medicine, Neurology, Obstetrics and Gynecology, Pathology, Pediatrics, Pharmacology, Preventive Medicine, Psychiatry, Radiology, Surgery, and Tropical Public Health. In addition, practical instruction in the taking of case histories and physical examinations is given on the wards and in the out-patient departments of the hospitals at which there are Harvard teaching units.

During the second year, in addition to instruction in certain aspects of genetics, a series of lectures develops further concepts of individual psychologic functioning. Emphasis now shifts to the nature and genesis of abnormal psychological mechanisms which result from both social and physical factors and are manifested in symptoms and behavioral disturbances.

GENERAL PLAN OF THE THIRD AND FOURTH YEARS

The instruction in the third and fourth years is carried on at the teaching hospitals affiliated with the Medical School. It is designed to teach the student to apply the principles of normal

PLAN OF INSTRUCTION

and abnormal human biology, acquired in the first two years, to the diagnosis and treatment of disease.

The program of instruction is divided into three parts which form a continuum extending from September of the third year to the end of May of the fourth year. Periods of vacation, the longest three weeks, are interspersed at intervals.

The first part consists of a three month course called the Introduction to the Clinic, the aim of which is to bring the student to a higher level of clinical competence than is possible to achieve in the second semester of the second year. Each student is assigned to one of four general hospital areas — Beth Israel Hospital, Boston City Hospital, Massachusetts General Hospital, and Peter Bent Brigham Hospital — for theoretical and practical instruction in the evaluation of patients. Time is approximately evenly divided between medicine, surgery, and the various medical specialities. This phase of the instruction is conducted six mornings and one afternoon each week in small groups on the wards and in the out-patient departments. Two other afternoons each week are devoted to a course in aseptic technique and special lectures and exercises covering a variety of topics.

The second part of the program, consisting entirely of clinical clerkships, is called the Principal Clinical Year. This year is divided into four twelve-week periods as follows: one twelve-week period is devoted to Medicine; another to Surgery; one is divided equally between Pediatrics (six weeks) and Obstetrics and Gynecology (six weeks); while the fourth is divided into four three-week sections devoted respectively to Psychiatry, Neurology, Orthopedics, and the three specialities of Dermatology, Ophthalmology, and Otolaryngology.

The third and final part, comprising the last five months of the four years of instruction, is given over to elective programs. From the wide variety of elective courses and other instructional opportunities offered by the several departments of the Medical School, each student, with the aid of a faculty tutor, is expected to select a program of work which will allow him to explore some area of interest to him. Generally, elective courses are of

HARVARD MEDICAL SCHOOL

two types: "block" courses, lasting one or more months, which presuppose that the student will devote the major portion of his time to the course, and "longitudinal" courses meeting for one to three hours, one to three times per week, for varying numbers of weeks. While ordinarily instruction during the elective period is confined to the Medical School and its affiliated hospitals, relevant courses in other parts of the University and at other institutions, in this country and abroad, may be included.

THE TUTORIAL PROGRAM AND STUDENT RESEARCH

The Tutorial Program was established in 1923 to foster student interest and participation in research. In 1957 it was expanded to provide each entering student with a tutor for his first year. Some twenty-five Tutors in Medical Sciences are appointed annually to enable first year students to meet informally in groups of five with a tutor. These weekly meetings are intended to assist the student in organizing and correlating his knowledge and to point out the implications and applications of the knowledge of basic science gained in the formal courses to clinical medicine and to research. These are not intended to be review sessions or to prepare students for examinations in the formal courses, but to develop better understanding of the medical sciences as a whole and of medicine as an art and profession. In addition the expanded Tutorial System provides an opportunity for each student during his first year to become well acquainted with some member of the Faculty to whom he may turn for advice in planning his medical career and in other matters.

In 1964 the program was further expanded to provide each third year student with a faculty advisor to assist him in the design of a meaningful program of work for his Elective Period at the end of the fourth year.

The Honors Tutorial Program of the second, third and fourth years is designed primarily to aid students who wish to undertake original research in one of the medical sciences during their medical school careers. Students doing research, or planning to

PLAN OF INSTRUCTION

do research, are assigned to the appropriate Tutor for guidance. The Tutors may organize seminars and symposia to assist students to decide on a field of research or to formulate a specific research problem. They also help the student by placing him with the member of the Faculty whose research interests are in his field and who is best suited to guide his research.

Students may devote free time during the school year and the summer months to this research problem. Fellowships are available for the financial support of student research both during the summer months and during the school year. Students also have the opportunity to withdraw from medical school for a year to pursue a research problem. (See section on "Opportunities for Research" page 94). The results of the research may be presented as a thesis at the end of the fourth year in support of the student's candidacy for the medical degree with Honors in a Special Field.

Abbreviations used in the following pages:

B.C.H.	= Boston City Hospital.	M.M.H.C.	= Massachusetts Mental Health Center.
B.L.I.H.	= Beth Israel Hospital.	Mt.A.H.	= Mount Auburn Hospital.
B.I.H.	= Boston Lying-in Hospital.	N.E.C.H.	= New England Center Hospital.
C.H.M.C.	= The Children's Hospital Medical Center.	N.E.D.H.	= New England Deaconess Hospital.
C.M.C.	= Children's Medical Center.	P.B.B.H.	= Peter Bent Brigham Hospital.
F.H.W.	= Free Hospital for Women.	P.L.I.H.	= Providence Lying-in Hospital.
H.M.S.	= Harvard Medical School.	R.B.B.H.	= Robert Breck Brigham Hospital.
L.I.H.	= Long Island Hospital.	S.D.M.	= School of Dental Medicine.
McL.H.	= McLean Hospital.	S.P.H.	= School of Public Health.
M.E.E.I.	= Massachusetts Eye and Ear Infirmary.	W.R.V.A.H.	= West Roxbury Veterans Administration Hospital.
M.G.H.	= Massachusetts General Hospital.		
M.I.T.	= Massachusetts Institute of Technology.		

HARVARD MEDICAL SCHOOL

PLAN OF INSTRUCTION

FIRST YEAR													
SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.		
		GROSS ANATOMY CELLULAR BIOCHEMISTRY CIRCULATORY PHYSIOLOGY GENERAL HISTOLOGY AND CYTOLOGY				RESPIRATION, KIDNEY, AND BODY FLUIDS	GASTRO- INTESTINAL AND ENDOCRINE SYSTEMS	NEURO- SCIENCES		VACATION RESEARCH VOLUNTARY WORK			
						BIOSTATISTICS		PSYCHIC GR. & DEV.					
SECOND YEAR													
V A C A T I O N		BACTERIOLOGY PATHOLOGY PHARMACOLOGY GENETICS					PARASITOLOGY	PATHOPHYSIOLOGY		VACATION RESEARCH VOLUNTARY WORK			
								CASE TAKING					
SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.		
											VACATION RESEARCH VOLUNTARY WORK		

PLAN OF INSTRUCTION

		THIRD				AND				FOURTH YEARS			
SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.		
V A C A T I O N	INTRODUCTION TO THE CLINIC			PRINCIPAL CLINICAL YEAR MEDICINE* (12 weeks)°		V A C A T I O N	PRINCIPAL CLINICAL YEAR SURGERY* (12 weeks)°		PRINCIPAL CLINICAL YEAR PEDIATRICS* (6 weeks)° OBSTETRICS AND GYNECOLOGY* (6 weeks)°		V A C A T I O N		
V A C A T I O N	PRINCIPAL CLINICAL YEAR DERM. OPHTH. OTOL* (3 wks.)° PSYCH.* (3 wks.)° NEUR.* (3 wks.)° ORTH. SURG.* (3 wks.)°		R E P A E R D I I N O G D				ELECTIVE PERIOD		E X A M S				
SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.		

Recess.

* Order of subjects variable.

° One afternoon per week is devoted to whole class exercises which include Legal Medicine (13 sessions) and Preventive Medicine (34 sessions).

HARVARD MEDICAL SCHOOL

DIVISION OF HOURS

FIRST YEAR	SECOND YEAR	THIRD AND FOURTH YEARS
Gross Anatomy . . . 245	Bacteriology . . . 168	Introduction to the Clinic (12 weeks) Medicine . . . 121 Surgery . . . 121 Specialties (including Pediatrics, Psychiatry, Neurology, Dermatology, Ophthalmology, Otolaryngology, Aseptic Technique) . . . 121 Principal Clinical Year (48 weeks) *Medicine . . . 480 *Surgery . . . 480 *Obstetrics and Gynecology . . . 240
General Histology and Cytology . . . 135	(including Parasitology and Neuro-pathology)	
Circulatory Physiology 80	Pharmacology . . . 120	
Cellular Biochemistry 87	Pathologic Physiology † . . . 538	
Respiration, Kidney, and Body Fluids . . . 168	Growth and Development:	
Gastrointestinal and Endocrine Systems 168	Genetics 15	
Neurosciences . . . 196	Introduction to Psychopathology 32	
Correlation Clinics . . . 64	Pediatrics 3	
Psychic Growth and Development . . . 13	Obstetrics and Gynecology . . . 18	
Biostatistics . . . 15		
Tutorial 36		

† A multidepartmental integrated course which includes Examination of the Patient (Medicine and Surgery) and Laboratory Diagnosis.
* Clerkships.

ANATOMY

ANNOUNCEMENT OF COURSES

DEPARTMENT OF ANATOMY

DON W. FAWCETT, M.D., Hersey Professor of Anatomy, James Stillman Professor of Comparative Anatomy, Head of the Department, and Curator of the Warren Anatomical Museum.

ROY O. GREEP, PH.D., A.M. (hon.), S.D. (hon.), Professor of Anatomy in the School of Dental Medicine.

SANFORD L. PALAY, M.D., A.M. (hon.), Bullard Professor of Neuroanatomy.

EDWARD A. EDWARDS, M.D., Associate Clinical Professor of Anatomy.

ELIZABETH D. HAY, M.D., A.M. (hon.), Louise Foote Pfeiffer Associate Professor of Embryology.

STANLEY J. ADELSTEIN, M.D., Assistant Professor of Anatomy and Philip H. Cook Fellow in Radiology.

JAY B. ANGEVINE, JR., PH.D., Assistant Professor of Anatomy.

SUSUMU ITO, PH.D., Assistant Professor of Anatomy.

CHARLES P. LYMAN, PH.D., Assistant Professor of Anatomy (part-time).

JEAN-PAUL REVEL, PH.D., Assistant Professor of Anatomy.

WILLARD D. ROTH, PH.D., Assistant Professor of Anatomy.

GEORGE SZABO, PH.D., Assistant Professor of Anatomy in the Department of Dermatology.

RICHARD E. COGGESHALL, M.D., Associate in Anatomy.

DONALD K. MOREST, M.D., Associate in Anatomy.

SERGEI P. SOROKIN, M.D., Associate in Anatomy.

ARTUR ABRAMOVICZ, M.D., Lecturer on Neuroanatomy (died October 4, 1965).

DAVID K. C. COOPER, M.B., B.S., Visiting Lecturer on Anatomy (from September 1, 1965).

TERENCE H. WILLIAM, M.B., CH.B., PH.D., Lecturer on Anatomy.

HARVARD MEDICAL SCHOOL

- DAVID HAMILTON, PH.D., Instructor in Anatomy.
ELIZABETH TABER, PH.D., Instructor in Anatomy.
MERRILL K. WOLF, M.D., Instructor in Anatomy.
DAVID E. WOLFE, M.D., Instructor in Anatomy.
ITA R. K. ABRAMOF, PH.D., Research Fellow in Anatomy (from September 1, 1965).
AUGUSTIN AOKI, M.D., Research Fellow in Anatomy.
JAMES D. DECK, PH.D., Research Fellow in Anatomy (from September 1, 1965).
DONALD FELDMAN, M.D., Research Fellow in Anatomy.
CHARLES J. FLICKINGER, M.D., Research Fellow in Anatomy.
PETER R. GOULD, M.Sc., Research Fellow in Anatomy (appointment expired September 30, 1965).
ROBERT M. HERNDON, M.D., Research Fellow in Anatomy (from September 15, 1965).
ALBERT L. JONES, M.D., Research Fellow in Anatomy.
JOHN A. LONG, PH.D., Research Fellow in Anatomy.
LORNA K. MEE, PH.D., Research Fellow in Anatomy.
PAULA M. ORKAND, PH.D., Research Fellow in Anatomy.
ELIO RAVIOLA, M.D., Research Fellow in Anatomy.
THOMAS A. REESE, M.D., Research Fellow in Anatomy (from September 1, 1965).
WILBUR G. ROBISON, JR., PH.D., Research Fellow in Anatomy.
CONSTANTINO SOTELO, M.D., PH.D., Research Fellow in Anatomy (from September 1, 1965).
FACUNDO VALVERDE-GARCIA, M.D., PH.D., Research Fellow in Anatomy (appointment expired September 1, 1965).
RAYMOND B. WUERKER, M.D., Research Fellow in Anatomy.
TOMAS A. ANGELILLO-MACKINLAY, M.D., Teaching Fellow in Anatomy (from September 1, 1965 through February 28, 1966).
GIUSEPPINA RAVIOLA, M.D., Teaching Fellow in Anatomy.
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Affiliated:

- J. DAVID ROBERTSON, M.D., Associate Professor of Neuropathology at the McLean Hospital.

ANATOMY

JESSE F. SCOTT, M.D., Associate Professor of Oncologic Medicine.
RICHARD L. SIDMAN, M.D., Assistant Professor of Neuropathology.
BENJAMIN SPECTOR, M.D., Coordinator of Anatomical Materials.

The Department of Anatomy offers instruction in gross human anatomy, histology and cytology, embryology, and neuroanatomy. Opportunities are also afforded for advanced work and research in these subjects. The Department occupies the Morgan Anatomical Building in the first three floors of the wing designated as B₁, and the first two floors of B₂. This space includes offices and research laboratories of the staff, rooms for graduate students and fellows, seminar rooms, a photographic department and laboratories devoted to cytochemistry, tissue culture, and electron microscopy.

There is a large departmental library containing complete files of the important journals in the fields of anatomy, developmental biology, and experimental cytology, together with many standard textbooks and works of reference. The library is open to staff, students and others, on a non-circulating basis.

The Minot Embryological Collection is a unique feature of the laboratory. It comprises approximately twenty-three hundred series of sections of selected vertebrate embryos representing a wide range of species and therefore affords opportunities for research in comparative embryology such as cannot be found elsewhere.

The Department also has valuable neurological material for both teaching and research, including two entire human brains cut serially in the transverse and horizontal planes, with the sections alternately stained by the Pal-Weigert and Nissl methods.

Required Courses

ANATOMY A AND B. *First Year.* — The courses of the first year are intended to teach human anatomy, both gross and microscopic, together with the essentials of human embryology and neurology.

In the study of gross anatomy, students make a complete dissection of the human body in the first semester. Four students are assigned to the same body, and will work together during the course. The study of the skeleton is carried on concurrently with the dissection, and each student is provided with a box of bones which may be kept

HARVARD MEDICAL SCHOOL

throughout the course. There are lectures and demonstrations which will serve to emphasize the clinical application of gross anatomical relations and to teach certain aspects of human biology not adequately treated in the textbooks. Special dissections made by prosectors from the second year class, and various anatomical specimens and preparations will be displayed to supplement the student's own dissections. Students are urged to study these specimens and to discuss them informally with the instructors.

That part of the course in microscopic anatomy given in the first semester is intended to give the student familiarity with the normal structure of cells and tissues as they appear under light microscope and with their finer structure as revealed by the electron microscope. The histology presented in the second semester forms part of the correlative teaching in which the structure, physiology, and biochemistry of the major organ systems are studied. Demonstrations of fresh tissue are prepared for examination with phase contrast and interference microscopy, and special cytological and histochemical preparations are displayed to present the broad range of techniques used in morphological investigations.

Embryology is taught in conjunction with histology and gross anatomy in a series of lectures in the first semester.

Neuroanatomical instruction is given as a part of the section of correlative teaching designated Neurosciences.

FIRST YEAR	HOURS
Lectures. Drs. FAWCETT, PALAY, EDWARDS, HAY, SZABO, ADLSTEIN, ANGEVINE, ITO, REVEL, ROTH, SOROKIN, COGGESHALL, HAMILTON, and MOREST.	
Demonstrations. To sections of the class, at the pleasure of the instructors.	
Laboratory work.	372

Fourth Year Elective Courses

BLOCK COURSES

501. Surgical Anatomy. Dr. EDWARDS and ASSOCIATES. (*Same course as Anatomy 203, Faculty of Arts and Sciences.*)
502. Comparative Vertebrate Physiology. Dr. LYMAN and ASSOCIATES. (*Same course as Anatomy 205, Faculty of Arts and Sciences.*)

ANATOMY

BLOCK COURSES — RESEARCH

- 801. Cytology and Cell Ultrastructure. Dr. FAWCETT. (*Same course as Anatomy 301, Faculty of Arts and Sciences.*)
- 802. Biology of Reproduction. Dr. GREEP. (*Same course as Anatomy 302, Faculty of Arts and Sciences.*)
- 803. Advanced Neuroanatomy and Neurocytology. Dr. PALAY. (*Same course as Anatomy 303, Faculty of Arts and Sciences.*)
- 804. Surgical Anatomy. Dr. EDWARDS. (*Same course as Anatomy 304, Faculty of Arts and Sciences.*)
- 805. Experimental Embryology; Developmental Cytology. Dr. HAY. (*Same course as Anatomy 305, Faculty of Arts and Sciences.*)
- 806. Cytology and Cell Ultrastructure. Dr. ITO. (*Same course as Anatomy 306, Faculty of Arts and Sciences.*)
- 807. Environmental and Comparative Physiology. Dr. LYMAN. (*Same course as Anatomy 307, Faculty of Arts and Sciences.*)
- 808. Cytochemistry; Experimental Cytology. Dr. REVEL. (*Same course as Anatomy 308, Faculty of Arts and Sciences.*)
- 809. Biology and Skin Pigmentation. Dr. SZABO. (*Same course as Dermatology 807 and same course as Anatomy 309, Faculty of Arts and Sciences.*)
- 810. Biochemical Cytology; Radiation Biology. Dr. ADELSTEIN. (*Same course as Anatomy 310, Faculty of Arts and Sciences.*)
- 811. Advanced Neuroanatomy and Neurogenesis. Dr. ANGEVINE. (*Same course as Anatomy 311, Faculty of Arts and Sciences.*)
- 812. Endocrinology of Reproduction. Dr. ARMSTRONG. (*Same course as Anatomy 312, Faculty of Arts and Sciences.*)
- 813. Advanced Neuroanatomy; Thalamus and Sensory Systems. Dr. MOREST. (*Same course as Anatomy 313, Faculty of Arts and Sciences.*)
- 814. Comparative Endocrinology and Neuroendocrinology. Dr. ROTH. (*Same course as Anatomy 314, Faculty of Arts and Sciences.*)
- 815. Histochemistry. Dr. SOROKIN. (*Same course as Anatomy 315, Faculty of Arts and Sciences.*)

LONGITUDINAL COURSES

- 701. Advanced Cytology. Dr. FAWCETT and ASSOCIATES. (*Same course as Anatomy 206, Faculty of Arts and Sciences.*)
- 702. Developmental Biology. Dr. HAY and ASSOCIATES. (*Same course as Anatomy 207, Faculty of Arts and Sciences.*) Will not be offered in 1965-1966.
- 703. Advanced Neurocytology. Dr. PALAY and ASSOCIATES. (*Same course as Anatomy 208, Faculty of Arts and Sciences.*)

HARVARD MEDICAL SCHOOL

DEPARTMENT OF BACTERIOLOGY AND IMMUNOLOGY

BERNARD D. DAVIS, M.D., Adele Lehman Professor of Bacteriology and Immunology, and Head of the Department.

ALBERT H. COONS, M.D., Career Investigator of the American Heart Association, and Visiting Professor of Bacteriology and Immunology.

JOHN F. ENDERS, PH.D., University Professor.

LUIGI C. GORINI, PH.D. (Equiv.), A.M. (hon.), American Cancer Society Professor of Bacteriology and Immunology.

MONROE D. EATON, M.D., Associate Professor of Bacteriology and Immunology.

HAROLD AMOS, PH.D., Associate Professor of Bacteriology and Immunology.

MAHLON B. HOAGLAND, M.D., Associate Professor of Bacteriology and Immunology, and Ruby Boyer Miller Fellow in Medical Research, and Tutor in Bacteriology and Immunology.

EDWARD H. KASS, PH.D., M.D., A.M. (hon.), Associate Professor of Bacteriology and Immunology.

JONATHAN R. BECKWITH, PH.D., Assistant Professor of Bacteriology and Immunology.

SIDNEY LESKOWITZ, PH.D., Assistant Professor of Bacteriology and Immunology at the Massachusetts General Hospital.

MORTIMER LITT, M.D., Assistant Professor of Bacteriology and Immunology.

HIROSHI NIKAIDO, M.D., Assistant Professor of Bacteriology and Immunology at the Massachusetts General Hospital.

ELMER PFEFFERKORN, PH.D., Silas Arnold Houghton Assistant Professor of Bacteriology and Immunology.

CHARLES T. AMBROSE, M.D., Associate in Bacteriology and Immunology.

JULIAN E. DAVIES, PH.D., Associate in Bacteriology and Immunology (on leave September 1, 1965 through August 31, 1966).

DONALD T. DUBIN, M.D., Associate in Bacteriology and Immunology.

BACTERIOLOGY AND IMMUNOLOGY

DAN FRAENKEL, PH.D., Associate in Bacteriology and Immunology.

HOWARD GOLDFINE, PH.D., Associate in Bacteriology and Immunology.

LAWRENCE J. J. KUNZ, PH.D., Associate in Bacteriology and Immunology at the Massachusetts General Hospital.

JEANA D. LEVINTHAL, M.D., Associate in Bacteriology and Immunology (on leave September 1, 1965 through August 31, 1966).

CHANDRA R. AMARASINGHAM, M.D., Research Associate in Bacteriology and Immunology.

JANINE A. ANDRE-SCHWARTZ, M.D., Research Associate in Bacteriology and Immunology.

EDWARD F. DEBONO, M.D., Research Associate in Bacteriology and Immunology.

HARVEY A. ELDER, M.D., Research Associate in Bacteriology and Immunology.

IOLANDA E. LOW, M.D., Research Associate in Bacteriology and Immunology.

MICHELINE M. MATHEWS, M.D., Research Associate in Bacteriology and Immunology (from September 1, 1965).

LUIS MELENDEZ, D.V.M., Research Associate in Bacteriology.

LAWRENCE M. B. RAZAVI, M.B., B.S., Research Associate in Bacteriology and Immunology.

BARBARA K. WATSON, PH.D., Research Associate in Bacteriology and Immunology.

ANN E. FARNHAM, PH.D., Instructor in Bacteriology and Immunology (appointment expired August 31, 1965).

GARETH M. GREEN, M.D., Instructor in Bacteriology and Immunology.

HUGH O. McDEVITT, M.D., Instructor in Bacteriology and Immunology.

DAVID H. SMITH, M.D., Instructor in Bacteriology and Immunology.

ALICE K. DALY, B.S., Assistant in Bacteriology and Immunology.

JOAN B. DANIELS, S.B., Assistant in Bacteriology and Immunology.

HARVARD MEDICAL SCHOOL

- MARK ABRAMOWICZ, M.D., Research Fellow in Bacteriology and Immunology.
- JACOB ARONOVITCH, PH.D., Research Fellow in Bacteriology and Immunology (from October 1, 1965).
- RICHARD C. BLINKOFF, PH.D., Research Fellow in Bacteriology and Immunology (from August 1, 1965).
- STAMATIA CONSTANTOPOULOS, M.D., Research Fellow in Bacteriology and Immunology.
- MARC H. DRESDEN, PH.D., Harold C. Ernst Research Fellow in Bacteriology and Immunology (from March 1, 1966).
- MICHAEL A. EDIDIN, PH.D., Research Fellow in Bacteriology and Immunology.
- ALTAN GUNALP, M.D., Research Fellow in Bacteriology and Immunology.
- PER OTTO HAGEN, M.D., Research Fellow in Bacteriology and Immunology.
- HELENE Z. HILL, PH.D., Research Fellow in Bacteriology and Immunology.
- KIICHI ISHIKAWA, M.D., Research Fellow in Bacteriology and Immunology (from December 15, 1965).
- GEORGE A. JACOBY, M.D., Research Fellow in Bacteriology and Immunology.
- EVA I. KATAJA, PH.D., Research Fellow in Bacteriology and Immunology.
- CHAVA KIRSCHMANN, PH.D., Research Fellow in Bacteriology and Immunology (appointment expired August 31, 1965).
- ROBERT E. KOHLER, JR., PH.D., Research Fellow in Bacteriology and Immunology.
- OTOHIKO KUNII, M.D., Research Fellow in Bacteriology and Immunology.
- MICHAEL MCGILL, M.D., Research Fellow in Bacteriology and Immunology.
- ARNOLD MEISLER, M.D., Research Fellow in Bacteriology and Immunology.
- YORIO NAIDE, M.D., Research Fellow in Bacteriology and Immunology (resigned November 30, 1965).

BACTERIOLOGY AND IMMUNOLOGY

DAVID OLD, PH.D., Harold C. Ernst Research Fellow in Bacteriology and Immunology.

LIANE REIF, PH.D., Research Fellow in Bacteriology and Immunology.

JOAN P. ROSCOE, PH.D., Research Fellow in Bacteriology and Immunology (from October 1, 1965).

DAVID RUSH, M.D., Research Fellow in Bacteriology and Immunology.

JOHN G. SCAIFE, PH.D., Research Fellow in Bacteriology and Immunology (from September 1, 1965).

OSCAR A. SCORNIK, M.D., Harold C. Ernst Research Fellow in Bacteriology and Immunology (appointment expired February 28, 1965).

RUY SOEIRO, M.D., Research Fellow in Bacteriology and Immunology (appointment expired August 31, 1965).

PAOLO F. STRIGINI, M.D., Research Fellow in Bacteriology and Immunology.

YOSHIFUMI TAKEDA, M.D., Research Fellow in Bacteriology and Immunology (from September 1, 1965).

ROBERTO M. TOSI, M.D., Research Fellow in Bacteriology and Immunology (appointment expired August 15, 1965).

BURTON E. TROPP, PH.D., Research Fellow in Bacteriology and Immunology (from September 1, 1965).

JAN VAN DER NOORDAA, M.D., PH.D., Research Fellow in Bacteriology and Immunology (appointment expired April 30, 1966).

JERRY BLOOM, M.D., Teaching Fellow in Bacteriology and Immunology.

Affiliated:

HOWARD H. HIATT, M.D., Herrman Ludwig Blumgart Professor of Medicine.

JOHN C. SNYDER, M.D., Professor of Public Health Bacteriology, and Dean of the School of Public Health.

THOMAS H. WELLER, M.D., LL.D., Richard Pearson Strong Professor of Tropical Health in the School of Public Health.

HARVARD MEDICAL SCHOOL

CHARLOTTE C. CAMPBELL, S.B., Associate Professor of Medical Mycology, S.P.H.

KARL F. AUSTEN, M.D., Assistant Professor of Medicine.

RONALD J. GIBBONS, PH.D., Assistant Professor of Bacteriology at the Forsyth Dental Infirmary for Children.

THOMAS J. GILL, 3D, M.D., Assistant Professor of Pathology.

EDGAR HABER, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

SAMUEL L. KATZ, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

SIGMUND S. SOCRANSKY, D.D.S., Assistant Professor of Periodontology at the Forsyth Dental Infirmary for Children.

MORTON N. SWARTZ, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

HENRY JOSEPH WINN, M.D., Assistant Professor of Bacteriology and Immunology in the Department of Surgery at the Massachusetts General Hospital.

KURT J. BLOCH, M.D., Associate in Medicine at the Massachusetts General Hospital.

FRED S. ROSEN, M.D., Associate in Pediatrics at The Children's Hospital.

BARBARA W. KALCKAR, PH.D., Research Associate in Bacteriology and Immunology in the Department of Medicine.

J. GABRIEL MICHAEL, PH.D., Research Associate in Bacteriology and Immunology in the Department of Pediatrics.

DAVID S. FEINGOLD, M.D., Associate in Medicine at the Beth Israel Hospital.

Required Course

BACTERIOLOGY A. *Second Year.*—This course consists of lectures, laboratory exercises, and conferences, designed to acquaint the student with the principles of bacteriology, virology, immunology, allergy, and chemotherapy. The fungi will also be briefly considered.

The first part of the course consists of an introduction to general microbiology, including the structure, physiology, metabolism, and genetics of bacteria and bacteriophage. Attention will then be given

BACTERIOLOGY AND IMMUNOLOGY

to the agents of infectious disease, with emphasis on properties that are useful in their identification and in understanding their pathogenicity. The exercises on host-parasite relations and allergy will be correlated with pathology, while those on chemotherapy will be correlated with pharmacology. Clinics held in various hospitals will introduce the student to infectious disease in man.

While the course is designed primarily as a preparation for later clinical work on infectious disease, considerable attention will also be given to illustrating the use of unicellular organisms in studying problems of cell physiology and molecular biology common to all cells, including those of man.

SECOND YEAR

HOURS

Lectures, laboratory work, and conferences. Dr. DAVIS and STAFF.

First half-year. Most exercises take place on Monday, Wednesday, and Friday afternoons with conferences on Saturday mornings.

168

Fourth Year Elective Courses

BLOCK COURSES —RESEARCH

801. Bacterial Metabolism; Chemotherapy. Dr. DAVIS. (*Same course as Bacteriology 301, Faculty of Arts and Sciences.*)
802. Immunology and Immunochemistry. Dr. COONS. (*Same course as Bacteriology 304, Faculty of Arts and Sciences.*)
803. Virology. Dr. ENDERS. (*Same course as Bacteriology 303, Faculty of Arts and Sciences.*)
804. Bacterial Physiology; Control of Biosynthesis. Dr. GORINI. (*Same course as Bacteriology 310, Faculty of Arts and Sciences.*)
805. Macromolecule Synthesis in Animal Cells. Dr. AMOS. (*Same course as Bacteriology 308, Faculty of Arts and Sciences.*)
806. Virology. Dr. EATON. (*Same course as Bacteriology 302, Faculty of Arts and Sciences.*)
807. Protein Synthesis and its Control. Dr. HOAGLAND. (*Same course as Bacteriology 314, Faculty of Arts and Sciences.*)
808. Medical Bacteriology. Dr. KASS.
809. Bacterial Genetics. Dr. BECKWITH.
810. Bacterial Growth; Nucleic Acid Metabolism. Dr. DUBIN. (*Same course as Bacteriology 307, Faculty of Arts and Sciences.*)
811. Bacterial Metabolism. Dr. FRAENKEL.
812. Bacterial Lipids and Membranes. Dr. GOLDFINE. (*Same course as Bacteriology 305, Faculty of Arts and Sciences.*)
813. Immunochemistry. Dr. LESKOWITZ.
814. Viruses and Animal Cells. Dr. PFEFFERKORN.

HARVARD MEDICAL SCHOOL

LONGITUDINAL COURSES

- 701. Immunology. Drs. COONS, K. F. AUSTEN, HABER, LESKOWITZ, and GILL. (*Same course as Bacteriology 207, Faculty of Arts and Sciences.*)
- 702. General Virology. Drs. EATON, AMOS, and PFEFFERKORN. (*Same course as Bacteriology 206, Faculty of Arts and Sciences.*) Will not be offered in 1965-1966.
- 703. Microbial and Molecular Genetics. Dr. DAVIS and ASSOCIATES. (*Same course as Bacteriology 208, Faculty of Arts and Sciences.*) Will not be offered in 1965-1966.

BIOLOGICAL CHEMISTRY

DEPARTMENT OF BIOLOGICAL CHEMISTRY

ELKAN R. BLOUT, PH.D., A.M. (hon.), Edward S. Harkness Professor of Biological Chemistry, and Head of the Department.

ERIC G. BALL, PH.D., S.D. (hon.), A.M. (hon.), Edward S. Wood Professor of Biological Chemistry, and Chairman of the Division of Medical Sciences of the Faculty of Arts and Sciences.

JORDI FOLCH-PI, M.D., A.M. (hon.), Professor of Neurochemistry at the McLean Hospital.

HERMAN M. KALCKAR, M.D., PH.D., A.M. (hon.), Professor of Biological Chemistry at the Massachusetts General Hospital.

MANFRED L. KARNOVSKY, PH.D., A.M. (hon.), Harold T. White Professor of Biological Chemistry and Secretary of the Faculty of Medicine.

EUGENE P. KENNEDY, PH.D., A.M. (hon.), Hamilton Kuhn Professor of Biological Chemistry.

BERT L. VALLEE, M.D., A.M. (hon.), Paul C. Cabot Professor of Biological Chemistry.

CLAUDE A. VILLEE, JR., PH.D., A.M. (hon.), Andelot Professor of Biological Chemistry, and Tutor in Biological Chemistry.

LEWIS L. ENGEL, PH.D., Associate Professor of Biological Chemistry, and Permanent Faculty Fellow of the American Cancer Society.

ROGER W. JEANLOZ, D.Sc., A.M. (hon.), Associate Professor of Biological Chemistry at the Massachusetts General Hospital.

WALTER E. KNOX, M.D., Associate Professor of Biological Chemistry at the New England Deaconess Hospital.

*ARTHUR K. SOLOMON, PH.D., D.PHIL., Associate Professor of Biophysics.

JOSEPH B. ALPERS, M.D., Assistant Professor of Biological Chemistry.

JOHN L. BETHUNE, PH.D., Assistant Professor of Biological Chemistry at the Peter Bent Brigham Hospital.

* Appointment under the Committee on Medical Research in Biophysics.

HARVARD MEDICAL SCHOOL

DONALD G. COMB, PH.D., Assistant Professor of Biological Chemistry.

JOHN GERGELY, M.D., PH.D., Assistant Professor of Biological Chemistry (part-time).

DWAIN D. HAGERMAN, M.D., Assistant Professor of Biological Chemistry at the Free Hospital for Women and Tutor in Biological Chemistry.

STANDISH C. HARTMAN, PH.D., Assistant Professor of Biological Chemistry.

GEORGE HAUSER, PH.D., Assistant Professor of Biological Chemistry at the McLean Hospital.

EDMUND C. C. LIN, PH.D., Assistant Professor of Biological Chemistry.

SUSAN LOWEY, PH.D., Assistant Professor of Biological Chemistry at The Children's Hospital.

CHARLES C. RICHARDSON, M.D., Assistant Professor of Biological Chemistry.

SIDNEY V. RIEDER, PH.D., Assistant Professor of Biological Chemistry at the Massachusetts General Hospital.

DONALD F. H. WALLACH, M.D., Assistant Professor of Biological Chemistry and Tutor in Biological Chemistry.

PIERRE J. STOFFYN, PH.D., Lecturer on Biological Chemistry at the McLean Hospital.

ROBERT A. DARROW, PH.D., Associate in Biological Chemistry at the Massachusetts General Hospital.

CLIFFE D. JOEL, PH.D., Associate in Biological Chemistry.

ROBERT L. JUNGAS, PH.D., Associate in Biological Chemistry.

LEWIS C. MOKRASCH, PH.D., Associate in Biological Chemistry at the McLean Hospital.

HENRY PAULUS, PH.D., Associate in Biological Chemistry.

WILLIAM J. REDDY, D.Sc., Associate in Biological Chemistry at the Peter Bent Brigham Hospital

JAMES F. RIORDAN, PH.D., Associate in Biological Chemistry.

ROBERT G. SPIRO, M.D., Associate in Biological Chemistry at the Peter Bent Brigham Hospital.

BIOLOGICAL CHEMISTRY

- GERALD M. EDELMAN, M.D., PH.D., Visiting Lecturer on Biological Chemistry (December 1 through December 31, 1965).
- HAR G. KHORANA, PH.D., Visiting Lecturer on Biological Chemistry (April 15 through May 15, 1966).
- ARTHUR KORNBERG, M.D., Visiting Lecturer on Biological Chemistry (February 15 through March 15, 1966).
- GENE F. LATA, PH.D., Visiting Lecturer on Biological Chemistry.
- LEWIS T. MANN, JR., PH.D., Lecturer on Biological Chemistry.
- ELIZABETH R. SIMONS, PH.D., Lecturer on Biological Chemistry.
- ALISTAIR M. STEPHEN, PH.D., Visiting Lecturer on Biological Chemistry (appointment expired January 31, 1966).
- LUCILA A. AUTILIO, B.S., Research Associate in Biological Chemistry.
- ANIL K. BHATTACHARYYA, D.PHIL., Research Associate in Biological Chemistry (from September 15, 1965).
- REINHART B. BILLIAR, PH.D., Research Associate in Biological Chemistry (resigned December 31, 1965).
- ELIZABETH F. CLAFLIN, PH.D., Research Associate in Biological Chemistry.
- JOHN T. CLARKE, PH.D., Research Associate in Biological Chemistry (resigned December 31, 1965).
- NICOLAS S. CONSTANTSAS, PH.D., Research Associate in Biological Chemistry.
- THOMAS L. COOMBS, PH.D., Research Associate in Biological Chemistry.
- KANEY EBISUZAKI, PH.D., Research Associate in Biological Chemistry.
- BENJAMIN ECKSTEIN, PH.D., Research Associate in Biological Chemistry.
- JOSEPH EICHBERG, JR., S.B., Research Associate in Biological Chemistry.
- JOHN M. FRANZ, PH.D., Research Associate in Biological Chemistry (from September 1, 1965).
- SHOU-CHENG J. FU, PH.D., Research Associate in Biological Chemistry.

HARVARD MEDICAL SCHOOL

- KEIICHIRO FUWA, PH.D., Research Associate in Biological Chemistry.
- OLGA F. GREENGARD, PH.D., Research Associate in Biological Chemistry.
- SEN-ITIRO HAKOMORI, M.D., Research Associate in Biological Chemistry.
- SAMUEL R. HIMMELHOCH, M.D., Research Associate in Biological Chemistry (appointment expired July 30, 1966).
- MERVYN ISRAEL, PH.D., Research Associate in Biological Chemistry.
- CHARLES R. JENKIN, PH.D., Research Associate in Biological Chemistry (from September 1, 1965).
- VIRENDRA KAMAT, PH.D., Research Associate in Biological Chemistry (appointment expired September 30, 1965).
- JAMES P. KOCH, M.D., Research Associate in Biological Chemistry.
- WALTER A. KORNICKER, PH.D., Research Associate in Biological Chemistry.
- KICHANG KUM, M.D., PH.D., Research Associate in Biological Chemistry (from March 1, 1966).
- GEORGE LOUTFI, M.D., Research Associate in Biological Chemistry.
- ARON O. LURIE, M.B., CH.B., PH.D., Research Associate in Biological Chemistry.
- ROBERT P. MARTIN, PH.D., Research Associate in Biological Chemistry (resigned July 31, 1965).
- EZIO MERLER, PH.D., Research Associate in Biological Chemistry.
- JAMES C. ORR, PH.D., Research Associate in Biological Chemistry.
- ANNETTE M. C. RAPIN, PH.D., Research Associate in Biological Chemistry.
- GLYN P. ROBERTS, PH.D., Research Associate in Biological Chemistry (from March 1, 1966).
- ANDRE ROSOWSKY, M.D., Research Associate in Biological Chemistry.

BIOLOGICAL CHEMISTRY

NIKOLA Z. STANACEV, PH.D., Research Associate in Biological Chemistry.

ANNE M. STOFFYN, PH.D., Research Associate in Biological Chemistry.

GEORGE H. TAIT, PH.D., Research Associate in Biological Chemistry (from September 1, 1965).

MARVIN H. WINKLER, PH.D., Research Associate in Biological Chemistry.

TAI T. WU, PH.D., Research Associate in Biological Chemistry.

ELVERA ALGERI GLASS, S.B., Assistant in Biological Chemistry.

STELIOS AKTIPIS, PH.D., Research Fellow in Biological Chemistry (from October 1, 1965).

WILBUR W. BAKER, PH.D., Research Fellow in Biological Chemistry.

ALEXANDER U. BERTLAND, PH.D., Research Fellow in Biological Chemistry.

A. HUNTLEY BLAIR, PH.D., Research Fellow in Biological Chemistry.

ROBERT H. CAGAN, A.M., Research Fellow in Biological Chemistry.

JAMES R. CARTER, JR., M.D., Research Fellow in Biological Chemistry.

TOBY M. CHAPMAN, PH.D., Research Fellow in Biological Chemistry.

NEAL W. CORNELL, PH.D., Research Fellow in Biological Chemistry.

RICHARD C. DAVIES, A.B., Research Fellow in Biological Chemistry.

WILLIAM D. DENCKLA, M.D., Research Fellow in Biological Chemistry.

EVELINE S. DEPERETTI, M.D., Research Fellow in Biological Chemistry (from September 1, 1965).

THOMAS F. DEUEL, M.D., Research Fellow in Biological Chemistry (resigned February 11, 1966).

CHARLES H. DOERING, PH.D., Research Fellow in Biological Chemistry.

HARVARD MEDICAL SCHOOL

SUSAN DOWD, PH.D., Research Fellow in Biological Chemistry.
JOHN T. DUNN, M.D., Research Fellow in Biological Chemistry.
MARY M. EICHHORN, PH.D., Research Fellow in Biological Chemistry.

CHARLES F. FOX, PH.D., Research Fellow in Biological Chemistry.
TOMOKO FUJII, D.M.S., Research Fellow in Biological Chemistry.
SUGURU FUKUSHI, M.D., PH.D., Research Fellow in Biological Chemistry (from September 1, 1965).

THOMAS J. GAFFNEY, PH.D., Research Fellow in Biological Chemistry (appointment expired October 15, 1965).

ALAN G. GOODRIDGE, PH.D., Research Fellow in Biological Chemistry.

PAUL H. GROSS, DR.SC., Research Fellow in Biological Chemistry.
JOHN H. HARRISON, IV, PH.D., Research Fellow in Biological Chemistry.

OTOMATSU HOSHINO, DR.PHARM.SCI., Research Fellow in Biological Chemistry (from October 1, 1965).

KUNTHALA JAYARAMAN, PH.D., Research Fellow in Biological Chemistry (from January 1, 1966).

PETERANNE B. JOEL, PH.D., Research Fellow in Biological Chemistry.

HERBERT M. KAGAN, PH.D., Research Fellow in Biological Chemistry (from May 1, 1966).

HARRY J. KARAVOLAS, PH.D., Research Fellow in Biological Chemistry.

JUNZO KATO, M.D., Research Fellow in Biological Chemistry (from September 1, 1965).

AFZAL A. KHAN, PH.D., Research Fellow in Biological Chemistry (from January 1, 1966).

PETER KNEER, M.D., Research Fellow in Biological Chemistry (from September 1, 1965).

YUTAKA KOJIMA, M.D., PH.D., Research Fellow in Biological Chemistry (from April 1, 1966).

MELODEE S. KORNACKER, PH.D., Research Fellow in Biological Chemistry.

BIOLOGICAL CHEMISTRY

DANIEL LAUFER, PH.D., Research Fellow in Biological Chemistry.

RHODA K. MAKOFF, PH.D., Research Fellow in Biological Chemistry.

MICHAEL J. MALONE, M.D., Research Fellow in Biological Chemistry.

NORMAN R. MARQUIS, PH.D., Research Fellow in Biological Chemistry (from September 15, 1965).

EDOARDO MENINI, PH.D., Research Fellow in Biological Chemistry (from September 1, 1965).

NASIR-UD-DIN, PH.D., Research Fellow in Biological Chemistry (resigned September 1, 1965).

ALEXANDER NEVILLE, M.B., CH.B., PH.D., Research Fellow in Biological Chemistry (from September 15, 1965).

JOY H. OZER, PH.D., Research Fellow in Biological Chemistry.

NELLY D. PARRA, DR. PHARM., Research Fellow in Biological Chemistry (appointment expired July 29, 1965).

PETER PERCHEMLIDES, PH.D., Research Fellow in Biological Chemistry.

ROMANO PIRAS, PH.D., Research Fellow in Biological Chemistry.

JACQUES R. POORTMANS, PH.D., Research Fellow in Biological Chemistry (from September 1, 1965).

ERIKA E. RANDERATH, PH.D., Research Fellow in Biological Chemistry.

NILIMA SARKAR, PH.D., Research Fellow in Biological Chemistry.

PETER B. SCHNEIDER, M.D., Research Fellow in Biological Chemistry.

GUIDO SCHOENENBERGER, M.D., Research Fellow in Biological Chemistry.

DAVID S. SIGMAN, A.M., Research Fellow in Biological Chemistry (from October 1, 1965).

DALE R. SNYDER, M.D., Research Fellow in Biological Chemistry (from August 1, 1965).

MORDECHAI SOKOLOVSKY, PH.D., Research Fellow in Biological Chemistry.

HARVARD MEDICAL SCHOOL

- MASAMI SUZUKI, PH.D., Research Fellow in Biological Chemistry
(from September 1, 1965).
- SHUJI TANAKA, M.D., Research Fellow in Biological Chemistry.
- MANNING M. THALER, M.D., Research Fellow in Biological Chemistry
(from September 1, 1965).
- AMBIKA J. TOLANI, PH.D., Research Fellow in Biological Chemistry
(from September 1, 1965).
- GEORGE C. TREMBLAY, PH.D., Research Fellow in Biological Chemistry.
- SU-CHEN S. TSAI, PH.D., Research Fellow in Biological Chemistry
(from September 1, 1965).
- VISHNU M. VAIDYA, PH.D., Research Fellow in Biological Chemistry
(from October 1, 1965).
- SUBBIAH VENKATARAMAN, PH.D., Research Fellow in Biological Chemistry
(from May 1, 1966).
- MARGARET G. WARD, PH.D., Research Fellow in Biological Chemistry
(appointment expired September 15, 1965).
- BERNARD WEISS, M.D., Research Fellow in Biological Chemistry
(from September 1, 1965).
- PETER H. ZAHLER, PH.D., Research Fellow in Biological Chemistry
(from October 1, 1965).
- TOVA ZEHAVI, PH.D., Research Fellow in Biological Chemistry.
- URI ZEHAVI, PH.D., Research Fellow in Biological Chemistry.
- LEON E. ZELEWSKI, M.D., Research Fellow in Biological Chemistry
(appointment expired October 30, 1965).
- NOE ZWAIG, PH.D., Research Fellow in Biological Chemistry.
- JOSEPH R. PARRISH, JR., B.S., Teaching Fellow in Biological Chemistry.
- KATHERINE POINTER, M.A., Teaching Fellow in Biological Chemistry.
- RICHARD H. QUARLES, A.B., Teaching Fellow in Biological Chemistry.
- ROBERT T. SIMPSON, M.D., Teaching Fellow in Biological Chemistry.

BIOLOGICAL CHEMISTRY

Affiliated:

FINN BRUDEVOLD, D.D.S., A.M. (hon.), Professor of Dentistry at the Forsyth Dental Infirmary.

GEORGE NICHOLS, JR., M.D., Clinical Professor of Medicine.

JAMES H. SHAW, PH.D., Professor of Nutrition in the School of Dental Medicine.

FREDRICK J. STARE, PH.D., M.D., Professor of Nutrition, S.P.H.

D. MARK HEGSTED, PH.D., Associate Professor of Nutrition, S.P.H.

Required Course

BIOLOGICAL CHEMISTRY A. First Year.—During the first semester the lectures in Biological Chemistry discuss the chemical components of living matter and the metabolic processes common to all tissues. Laboratory work deals with the physical and chemical concepts necessary to an understanding of living processes, and the fundamental chemical characteristics of biological compounds and enzymatic reactions.

During the second semester the lectures and laboratory work in biochemistry are interwoven with those given by the Departments of Physiology and Anatomy. In the first six weeks the Department of Biological Chemistry will deal with the following topics: inorganic chemical composition of body tissues and fluids and physical chemical factors governing their control: the transport of O_2 and CO_2 in the blood and acid-base balance. The gastro-intestinal and endocrine systems will be studied in the second five-week period. The Department will present the chemical processes involved in digestion and absorption; the intermediary metabolism of the liver; the chemistry and metabolism of cholesterol, the bile acids, and the steroid hormones; and the regulatory effects of hormones in general on metabolism. In the third six-week period, which explores the neuro-sciences, certain special aspects of the chemistry and metabolism of brain and nerve are the contributions of the Department of Biological Chemistry.

FIRST YEAR

HOURS

Lectures and laboratory work. Drs. ALPERS, BALL, BETHUNE, BLOUT, COMB, DARROW, ENGEL, FOLCH-PI, GERGELEY, HAGERMAN, HARTMAN, HAUSER, HEGSTED, JEANLOZ, JOEL, KALCKAR,

HARVARD MEDICAL SCHOOL

KARNOVSKY, KENNEDY, KNOX, LIN, PAULUS, PEARLMAN, REDDY, RICHARDSON, RIEDER, SOLOMON, SPIRO, STARE, VALLEE, VILLEE, and WALLACH.

220

Fourth Year Elective Courses

BLOCK COURSES — RESEARCH

- 801. Lipid Biosynthesis and Metabolism. Dr. KENNEDY.
- 802. Biological Oxidation, Adipose Tissue Metabolism. Dr. BALL.
- 803. Biological Macromolecules. Dr. BLOUT. (*Same course as Biochemistry 309, Faculty of Arts and Sciences.*)
- 804. Neurochemistry. Dr. FOLCH-PI.
- 805. Phosphorylated Intermediary Compounds, Carbohydrate Metabolism. Dr. KALCKAR.
- 806. Biochemical Basis of Certain Physiological Functions, Membrane Lipids. Dr. M. L. KARNOVSKY.
- 807. Biochemistry of Embryonic Development and Cell Differentiation. Dr. C. A. VILLEE. (*Same course as Obstetrics and Gynecology 812.*)
- 808. Biochemistry of Steroids. Dr. ENGEL.
- 809. Biochemistry of Complex Polysaccharides, Glycoproteins, Glycolipids, and Bacterial Cell Walls. Dr. JEANLOZ.
- 810. Amino Acid Metabolism, Enzymic Basis of Genetic Defects, Enzymatic Adaptation. Dr. KNOX.
- 811. Biochemistry of Muscle. Dr. GERGELY.
- 812. Biochemistry of Female Hormones. Dr. HAGERMAN.
- 813. Mechanisms of Enzyme Action. Dr. HARTMAN.
- 814. Evolution and Control of Metabolic Pathways in Bacteria. Dr. LIN.
- 815. Carbohydrate Metabolism. Dr. RIEDER.
- 816. Cellular Membranes into Neoplasia. Dr. WALLACH.
- 817. Carbohydrate Metabolism in Cultured Cells. Dr. ALPERS.
- 818. Physical Chemistry of Protein-Protein Interactions. Dr. BETHUNE.
- 819. Biochemistry of Differentiation. Dr. COMB.
- 820. Mechanisms of Enzyme Action. Dr. DARROW.
- 821. Biosynthesis of Glycolipids and their Constituents. Dr. HAUSER.
- 822. Biochemistry of Lipids of Brain and Other Tissues. Dr. JOEL.
- 823. Peptide Biosynthesis in Bacteria. Dr. PAULUS.
- 824. Mechanisms of Action of Hormones. Dr. REDDY.
- 825. Chemistry and Metabolism of Glycoproteins. Dr. SPIRO.
- 826. Surgical Investigation. Dr. W. H. PEARLMAN. (*Same course as Surgery 809.*)
- 827. Mechanism of Enzyme Action, Active Enzymatic Sites and Chemical Modification of Enzymes and Proteins. Dr. VALLEE.

LONGITUDINAL COURSES

- 701. Advanced Biochemistry. Members of the Department.
- 702. Topics on Biochemical Evolution. Dr. LIN. (*Same course as Biochemistry 207, Faculty of Arts and Sciences.*)

DENTAL MEDICINE

DENTAL MEDICINE

Opportunities for voluntary and elective work are available at the School of Dental Medicine for third and fourth year medical students. Course material will be designed to meet individual needs where possible. Instruction will be on a tutorial basis. Make all inquiries at the Dean's Office, School of Dental Medicine.

Fourth Year Elective Courses

LONGITUDINAL COURSES

- 701. Genetics and Anthropology. Dr. HUNT.
- 702. Child Growth and Development. Dr. MOORREES.

HARVARD MEDICAL SCHOOL

DEPARTMENT OF DERMATOLOGY

- THOMAS B. FITZPATRICK, M.D., PH.D., Edward Wigglesworth
Professor of Dermatology, and Head of the Department.
- MAURICE M. TOLMAN, M.D., Clinical Professor of Dermatology.
- IRVIN H. BLANK, PH.D., Assistant Professor of Dermatology at
the Massachusetts General Hospital.
- RUTH K. FREINKEL, M.D., Assistant Professor of Dermatology.
- ROBERT D. GRIESEMER, M.D., Assistant Professor of Dermatology
at the Massachusetts General Hospital.
- GEORGE SZABO, PH.D., Assistant Professor of Anatomy in the
Department of Dermatology.
- GEORGE F. WILGRAM, M.D., PH.D., Assistant Professor of Derma-
tology.
- HOWARD P. BADEN, M.D., Associate in Dermatology.
- JEAN BURNETT, PH.D., Associate in Biological Chemistry in the
Department of Dermatology.
- ARTHUR EISEN, M.D., Associate in Dermatology at the Massachu-
setts General Hospital.
- IRVIN M. FREEDBERG, M.D., Associate in Dermatology at the Beth
Israel Hospital and Tutor in Medical Science.
- RICHARD MASTERS, M.D., Associate in Dermatology.
- MADHUKAR A. PATHAK, PH.D., Associate in Dermatology.
- WALTER F. LEVER, M.D., Lecturer on Dermatology.
- WALTER QUEVEDO, JR., PH.D., Visiting Lecturer on Dermatology.
- ROBERT SCHEUPLEIN, PH.D., Research Associate in Dermatology.
- WILLIAM L. CURWEN, M.D., Instructor in Dermatology.
- NICHOLAS J. FIUMARA, M.D., M.P.H., Instructor in Dermatology.
- WILLIAM R. HILL, JR., M.D., Instructor in Dermatology.
- CHARLES S. KEUPER, M.D., Instructor in Dermatology.
- PHILIP L. MCCARTHY, M.D., Instructor in Dermatology.
- A. DAVID MCGUGAN, M.B., CH.B., Instructor in Dermatology.
- ROBERT F. TILLEY, M.D., Instructor in Dermatology.
- LEROY D. AARONSON, M.D., Assistant in Dermatology.
- JOSEPH ALBERT, M.D., Assistant in Dermatology.

DERMATOLOGY

- EARL A. GLICKLICH, M.D., Assistant in Dermatology.
MILTON E. HELMAN, M.D., Assistant in Dermatology.
BURNHAM E. LAMKINS, M.D., Assistant in Dermatology.
MYRON H. MATZ, M.D., Assistant in Dermatology.
SABINO J. SINESI, M.D., Assistant in Dermatology.
ARTHUR S. SPANGLER, M.D., Assistant in Dermatology.
EDGAR FRENK, M.D., Research Fellow in Dermatology.
CLARENCE C. GOERTEMILLER, JR., PH.D., Research Fellow in Dermatology (resigned August 31, 1965).
KIICHI ISHIKAWA, M.D., Research Fellow in Dermatology (appointment expires December 15, 1965).
RAYMOND J. MCGILL, M.D., Research Fellow in Dermatology.
MARTIN C. MIHM, JR., M.D., Research Fellow in Dermatology.
MASAMITSU MIYAMOTO, M.D., Research Fellow in Dermatology (from September 1, 1965).
EDWIN L. TOLMAN, M.D., Research Fellow in Dermatology.
SHING Y. YIP, M.D., Research Fellow in Dermatology (appointment expired September 30, 1965).

Required Course

DERMATOLOGY. *Introduction to the Clinic* and *Principal Clinical Year*.—The courses emphasize the pathologic physiology of various diseases involving the skin and the recognition of cutaneous manifestations of systemic diseases. Instruction consists of lectures and clinical exercises at the hospitals during the *Introduction to the Clinic* and a clinical clerkship during the *Principal Clinical Year*.

INTRODUCTION TO THE CLINIC

HOURS

Lectures and clinical exercises. B.I.H., B.C.H., M.G.H., P.B.B.H.

PRINCIPAL CLINICAL YEAR

Clinical Clerkship. M.G.H.

40

Fourth Year Elective Courses

BLOCK COURSES

501M. Dermatology I. Dr. I. FREEDBERG.

502M. Clinical Clerkship. Dr. FITZPATRICK and ASSOCIATES.

HARVARD MEDICAL SCHOOL

- 503M. Pathology of Skin—Clinical and Microscopic Correlations. Drs. FITZPATRICK and W. CLARK. (*Same course as Pathology 511M.*)

BLOCK COURSES — RESEARCH

801. Dermatology II. Dr. I. FREEDBERG.
802. Research on the Biology of Skin: Melanin. Drs. FITZPATRICK, BURNETT, and SZABO.
803. Research on the Biology of Skin: Keratin. Drs. BADEN and WILGRAM.
804. Research on the Biology of Skin: Intermediate Metabolism of Skin. Dr. R. K. FREINKEL.
805. Research on the Biology of Skin: Photobiology; Biochemistry of Porphyrins. Dr. PATHAK.
806. Research on the Biology of Skin: Physiology of the Skin; Protective Mechanisms. Drs. BLANK and SCHEUPLEIN.
807. Biology of Skin and Pigmentation. Dr. SZABO. (*Same course as Anatomy 809.*)

LONGITUDINAL COURSES

701. Clinical Conference and Presentation of Patients. Dr. FITZPATRICK and ASSOCIATES.
702. Clinical Conference and Presentation of Patients. Dr. TOLMAN.
703. Seminars on Pathophysiology of Skin.
704. Neoplasms of Melanocytes and Related Problems in Cutaneous Pathology. Dr. W. CLARK. (*Same course as Pathology 701.*)

MEDICINE

DEPARTMENT OF MEDICINE

MAXWELL FINLAND, M.D., George Richards Minot Professor of Medicine, and Head of the Department at the Boston City Hospital.

HOWARD H. HIATT, M.D., Herrman Ludwig Blumgart Professor of Medicine and Head of the Department at the Beth Israel Hospital.

ALEXANDER LEAF, M.D., A.M. (hon.), Jackson Professor of Clinical Medicine and Head of the Department at the Massachusetts General Hospital.

GEORGE W. THORN, M.D., M.A. (hon.), LL.D. (hon.), Sc.D. (hon.), DR. OF MED. (hon.), Hersey Professor of the Theory and Practice of Physic, and Head of the Department at the Peter Bent Brigham Hospital.

PAUL C. ZAMECNIK, M.D., Collis P. Huntington Professor of Oncologic Medicine, Director of the J. Collins Warren Laboratories of the Huntington Memorial Hospital, and Chairman of the Executive Committee of the Departments of Medicine.

THEODORE L. BADGER, M.D., Clinical Professor of Medicine.

EDWARD F. BLAND, M.D., Clinical Professor of Medicine.

WILLIAM B. CASTLE, M.D., S.M. (hon.), M.D. (hon.), S.D. (hon.), LL.D., Francis Weld Peabody Faculty Professor of Medicine.

LEWIS DEXTER, M.D., Clinical Professor of Medicine, and Tutor in Medicine.

ROBERT H. EBERT, DR. PHIL., M.D., Professor of Medicine and Dean of the Faculty of Medicine.

LAURENCE B. ELLIS, M.D., Clinical Professor of Medicine.

EUGENE C. EPPINGER, M.D., Clinical Professor of Medicine and Assistant Dean of the Faculty of Medicine for Courses for Graduates.

SAMUEL L. GARGILL, M.D., Clinical Professor of Medicine.

GEORGE NICHOLS, JR., M.D., Clinical Professor of Medicine.

THOMAS A. WARTHIN, M.D., Clinical Professor of Medicine.

PAUL M. ZOLL, M.D., Clinical Professor of Medicine.

HARVARD MEDICAL SCHOOL

WALTER H. ABELMANN, M.D., Associate Clinical Professor of Medicine.

BENJAMIN ALEXANDER, M.D., Associate Professor of Medicine at the Beth Israel Hospital.

GEORGE F. CAHILL, JR., M.D., A.M. (hon.), Associate Professor of Medicine at the Peter Bent Brigham Hospital.

CHARLES S. DAVIDSON, M.D., C.M., A.M. (hon.), Associate Professor of Medicine.

KENDALL EMERSON, JR., M.D., Associate Clinical Professor of Medicine.

A. STONE FREEDBERG, M.D., Associate Professor of Medicine at the Beth Israel Hospital.

FRANK H. GARDNER, M.D., Associate Clinical Professor of Medicine.

IRVING H. GOLDBERG, M.D., PH.D., A.M. (hon.), Associate Professor of Medicine.

JEROME GROSS, M.D., Associate Professor of Medicine at the Massachusetts General Hospital.

DAVID HURWITZ, M.D., Associate Clinical Professor of Medicine.

SIDNEY H. INGBAR, M.D., Associate Professor of Medicine.

KURT J. ISSELBACHER, M.D., Associate Professor of Medicine at the Massachusetts General Hospital.

JAMES H. JANDL, M.D., Associate Professor of Medicine.

ALFRED KRANES, M.D., Associate Clinical Professor of Medicine.

GEORGE S. KURLAND, M.D., Associate Clinical Professor of Medicine.

ARTHUR J. LINENTHAL, M.D., Associate Clinical Professor of Medicine.

ALEXANDER MARBLE, M.D., Associate Clinical Professor of Medicine.

JANET W. McARTHUR, M.D., S.D. (hon.), Associate Clinical Professor of Medicine.

JOHN P. MERRILL, M.D., Associate Professor of Medicine at the Peter Bent Brigham Hospital.

MARIAN W. ROPES, M.D., Associate Clinical Professor of Medicine.

MEDICINE

JESSE F. SCOTT, M.D., A.M. (hon.), Associate Professor of Oncologic Medicine.

CHARLES L. SHORT, M.D., Associate Clinical Professor of Medicine.

JOHN B. STANBURY, M.D., Associate Clinical Professor of Medicine (resigned April 30, 1966).

LOUIS ZETZEL, M.D., Associate Clinical Professor of Medicine.

ALAN C. AISENBERG, M.D., PH.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

MARK D. ALTSCHULE, M.D., Assistant Clinical Professor of Medicine.

KARL F. AUSTEN, M.D., Assistant Professor of Medicine.

MYLES P. BAKER, M.D., Assistant Clinical Professor of Medicine.

BENJAMIN M. BANKS, M.D., Assistant Clinical Professor of Medicine.

ANTHONY F. BARTHOLOMAY, M.A., S.D., Assistant Professor of Mathematical Biology in the Department of Medicine.

THEODORE B. BAYLES, M.D., Assistant Clinical Professor of Medicine.

WILLIAM S. BECK, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

FREDERICK S. BIGELOW, M.D., Assistant Clinical Professor of Medicine.

EARLE M. CHAPMAN, M.D., Assistant Clinical Professor of Medicine.

HARRY A. DEROW, M.D., Assistant Clinical Professor of Medicine.

DANIEL S. ELLIS, M.D., Assistant Clinical Professor of Medicine.

RICHARD A. FIELD, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

ANNE P. FORBES, M.D., Assistant Clinical Professor of Medicine.

HOWARD S. FRAZIER, PH.D., M.D., Assistant Professor of Medicine at the Beth Israel Hospital.

NORBERT FREINKEL, M.D., Assistant Professor of Medicine.

DALE G. FRIEND, M.D., Assistant Professor of Medicine at the Peter Bent Brigham Hospital.

RICHARD GORLIN, M.D., Assistant Professor of Medicine.

HARVARD MEDICAL SCHOOL

EDGAR HABER, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

THOMAS C. HALL, M.D., Assistant Clinical Professor of Medicine.

ROGER B. HICKLER, M.D., Assistant Professor of Medicine.

FREDERIC L. HOCH, M.D., Assistant Professor of Medicine, and Tutor in Medical Science.

STEPHEN M. KRANE, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

MILTON LANDOWNE, M.D., Assistant Clinical Professor of Medicine.

JACOB LERMAN, M.D., Assistant Clinical Professor of Medicine.

HAROLD D. LEVINE, M.D., Assistant Clinical Professor of Medicine.

JOHN W. LITTLEFIELD, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital (on leave July 1, 1965 through June 30, 1966).

DAVID LITTMANN, M.D., Assistant Clinical Professor of Medicine.

FRANCIS C. LOWELL, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

GORDON S. MYERS, M.D., Assistant Clinical Professor of Medicine.

JOSEPH E. F. RISEMAN, M.D., Assistant Clinical Professor of Medicine.

HERBERT A. SELENKOW, M.D., Assistant Professor of Medicine at the Peter Bent Brigham Hospital.

MORTON N. SWARTZ, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

JAMES L. TULLIS, M.D., Assistant Clinical Professor of Medicine.

WARREN E. C. WACKER, M.D., Assistant Professor of Medicine.

ARTHUR L. WATKINS, M.D., Assistant Clinical Professor of Medicine.

ROE E. WELLS, M.D., Assistant Professor of Medicine.

D. MICHAEL YOUNG, M.D., Assistant Professor of Biological Chemistry in the Department of Medicine at the Massachusetts General Hospital.

KENNETH T. BIRD, M.D., Lecturer on Medicine.

JOSEPH F. DINGMAN, M.D., Lecturer on Medicine.

MEDICINE

JOSEPH W. GARDELLA, M.D., Lecturer on Medicine and Associate Dean of the Faculty of Medicine for Student Affairs.

JOHN H. KNOWLES, M.D., Lecturer on Medicine.

LUCILE ADAMSON, PH.D., Associate in Biological Chemistry in the Department of Medicine.

DAVID W. ALLEN, M.D., Associate in Medicine.

GEORGE E. ALTMAN, M.D., Clinical Associate in Medicine.

RONALD A. ARKY, M.D., Associate in Medicine.

RICHARD H. ASTER, M.D., Associate in Medicine and Tutor in Medical Science.

C. CABELL BAILEY, M.D., Clinical Associate in Medicine.

WILLIAM H. BAKER, M.D., Clinical Associate in Medicine.

GUY O. BARNETT, M.D., Associate in Medicine at the Massachusetts General Hospital.

SAMUEL B. BEASER, M.D., Clinical Associate in Medicine.

DANIEL S. BERNSTEIN, M.D., Associate in Medicine.

KURT J. BLOCH, M.D., Associate in Medicine at the Massachusetts General Hospital.

RICHARD A. BLOOMFIELD, M.D., Clinical Associate in Medicine.

NANCY L. R. BUCHER, M.D., Clinical Associate in Medicine.

WALTER R. BURACK, M.D., Clinical Associate in Medicine.

PHIN COHEN, M.D., Associate in Medicine.

PERRY J. CULVER, M.D., Clinical Associate in Medicine, and Assistant Dean of the Faculty of Medicine for Admission.

ALBERT I. C. DE FRIEZ, M.D., Clinical Associate in Medicine.

LESLIE J. DEGROOT, M.D., Associate in Medicine at the Massachusetts General Hospital.

DANIEL DEYKIN, M.D., Associate in Medicine and Tutor in Medical Science.

LAURENCE E. EARLEY, M.D., Associate in Medicine.

ALVIN ESSIG, M.D., Associate in Medicine at the Massachusetts General Hospital (resigned September 30, 1965).

DANIEL D. FEDERMAN, M.D., Associate in Medicine at the Massachusetts General Hospital.

DAVID S. FEINGOLD, M.D., Associate in Medicine at the Beth Israel Hospital.

HARVARD MEDICAL SCHOOL

ANDREW G. FRANTZ, M.D., Associate in Medicine at the Massachusetts General Hospital.

PAUL FREMONT-SMITH, M.D., Clinical Associate in Medicine.

ALLAN L. FRIEDLICH, M.D., Clinical Associate in Medicine.

RALPH S. GOLDSMITH, M.D., Associate in Medicine.

WALTER T. GOODALE, M.D., Clinical Associate in Medicine (on leave July 1, 1965 through June 30, 1966).

WARREN R. GUILD, M.D., Clinical Associate in Medicine.

VICTOR GUREWICH, M.D., Clinical Associate in Medicine.

JOHN G. HARTER, M.D., Clinical Associate in Medicine.

FREDERICK T. HATCH, M.D., Associate in Medicine at the Massachusetts General Hospital (resigned July 15, 1965).

EDGAR C. HENSHAW, M.D., Associate in Medicine.

BERNARD M. JACOBSON, M.D., Clinical Associate in Medicine.

JEREMIAS H. R. KAGI, M.D., Associate in Medicine.

RITA M. KELLEY, M.P.H., M.D., Clinical Associate in Medicine.

BERNARD KLIMAN, M.D., Associate in Medicine at the Massachusetts General Hospital.

DAVID P. LAULER, M.D., Associate in Medicine.

LEAH M. LOWENSTEIN, M.D., PH.D., Associate in Medicine.

FARAHE MALOOF, M.D., Clinical Associate in Medicine.

DONALD B. MARTIN, M.D., Associate in Medicine at the Massachusetts General Hospital.

DUDLEY MERRILL, M.D., Clinical Associate in Medicine.

JOHN A. MILLS, M.D., Associate in Medicine at the Massachusetts General Hospital.

JOHN M. MOSES, M.D., Associate in Medicine at the Massachusetts General Hospital.

DAVID G. NATHAN, M.D., Associate in Medicine.

LOT B. PAGE, M.D., Associate in Medicine at the Massachusetts General Hospital.

LIBERTO P. PECHET, M.D., Associate in Medicine.

MAURICE M. PECHET, PH.D., M.D., Associate in Medicine at the Massachusetts General Hospital.

GEORGE M. PIKE, M.D., Clinical Associate in Medicine.

MEDICINE

CURTIS PROUT, M.D., Clinical Associate in Medicine.

MITCHELL T. RABKIN, M.D., Associate in Medicine at the Massachusetts General Hospital.

STEPHEN H. ROBINSON, M.D., Associate in Medicine.

LEON D. SABATH, M.D., Associate in Medicine (from October 1, 1965).

WILLIAM J. SHRIBER, M.D., Clinical Associate in Medicine.

PHILIP J. SNODGRASS, M.D., Associate in Medicine and Henry A. and Camillus Christian Fellow in Medicine.

JULIAN G. SNYDER, PH.D., M.D., Clinical Associate in Medicine.

SAMUEL STEARNS, M.D., Clinical Associate in Medicine.

MYRON STEIN, M.D., Associate in Medicine (resigned July 31, 1965).

J. SYDNEY STILLMAN, JR., M.D., Clinical Associate in Medicine.

JOHN D. STOECKLE, M.D., Associate in Medicine at the Massachusetts General Hospital.

GEORGE P. STURGIS, M.D., Clinical Associate in Medicine.

MELVIN I. STURNICK, M.D., Clinical Associate in Medicine.

DAVID D. ULMER, M.D., Associate in Medicine.

ARNOLD N. WEINBERG, M.D., Associate in Medicine at the Massachusetts General Hospital.

EDWIN O. WHEELER, M.D., Clinical Associate in Medicine.

CONGER WILLIAMS, M.D., Clinical Associate in Medicine.

BERTRAM M. WINER, M.D., Clinical Associate in Medicine.

RICHARD WOLFF, M.D., Clinical Associate in Medicine.

NORMAN ZAMCHECK, M.D., Clinical Associate in Medicine.

KENNETH BURTON, PH.D., Visiting Lecturer on Medicine (resigned August 31, 1965).

THOMAS C. CHALMERS, JR., M.D., Lecturer on Medicine.

MARGARET CONROY, PH.D., Lecturer on Mathematical Biology in the Department of Medicine (from September 1, 1965).

ROBERT M. DOWBEN, M.D., Lecturer on Medicine.

JOHN R. GRAHAM, M.D., Lecturer on Medicine.

SEYMOUR J. GRAY, M.D., PH.D., Lecturer on Medicine.

MILTON W. HAMOLSKY, M.D., Lecturer on Medicine.

HARVARD MEDICAL SCHOOL

HARRIET L. HARDY, M.D., Lecturer on Medicine.

CLARK W. HEATH, M.D., Lecturer on Medicine.

ALBERT O. SEELER, M.D., Lecturer on Medicine.

DONALD W. SELDIN, M.D., Visiting Lecturer on Medicine (from February 13 through February 18, 1966).

ANGELO SERRA, LIBERO DOCENTE, Visiting Lecturer on Mathematical Biology in the Department of Medicine (appointment expired August 31, 1965).

JOHN B. STANBURY, M.D., Lecturer on Medicine (from May 1, 1966).

FREDERICK STOHLMAN, JR., M.D., Lecturer on Medicine.

MAURICE B. STRAUSS, M.D., Lecturer on Medicine.

JAMES E. C. WALKER, M.D., Lecturer on Medicine and Tutor in Medical Science.

CHESTER A. ALPER, M.D., Research Associate in Medicine.

SAUL ARONOW, PH.D., Research Associate in Medicine.

MARIOS C. BALODIMOS, M.D., Research Associate in Medicine.

THOMAS U. L. BIBER, M.D., Research Associate in Medicine (from September 1, 1965).

GORDON L. BROWNELL, PH.D., Research Associate in Medicine.

CHARLES B. CARPENTER, M.D., Research Associate in Medicine.

RENATA E. CATHOU, PH.D., Research Associate in Medicine.

ROBERT H. CRAIG, M.D., Research Associate in Medicine.

ARACELI M. ENGEL, PH.D., Research Associate in Medicine.

JOHN W. HARTHORNE, M.D., Research Associate in Medicine.

AUDREY E. HASCHEMEYER, PH.D., Research Associate in Medicine.

FLORENCE W. HAYNES, PH.D., Research Associate in Medicine.

MARIO A. INCHIOSA, JR., PH.D., Research Associate in Medicine.

PAUL JAGGER, M.D., Research Associate in Medicine.

BARBARA W. KALCKAR, PH.D., Research Associate in Bacteriology and Immunology in the Department of Medicine.

SHELBY KASHKET, PH.D., Research Associate in Medicine.

DONALD E. OKEN, M.D., Research Associate in Medicine.

PABLO PULIDO, M.D., Research Associate in Medicine.

KURT RANDERATH, DR.MED., Research Associate in Medicine.

MEDICINE

- ALISTAIR G. C. RENWICK, M.B., CH.B., Research Associate in Medicine (resigned October 15, 1965).
- CALVIN A. SARAVIS, PH.D., Research Associate in Biological Chemistry in the Department of Medicine.
- STEPHEN B. SHOHEET, M.D., Research Associate in Medicine.
- BUNSI TI SIMIZU, M.D., Research Associate in Medicine.
- MARY J. SPIRO, PH.D., Research Associate in Medicine.
- PHILIP STEINMETZ, M.D., Research Associate in Medicine (from August 1, 1965).
- MARY L. STEPHENSON, PH.D., Research Associate in Medicine.
- KATHLEEN STRATTON, PH.D., Research Associate in Medicine.
- HERBERT J. SUKENIK, PH.D., M.D., Research Associate in Medicine.
- MARVIN L. TANZER, M.D., Research Associate in Medicine.
- ANTONY I. VAGNUCCI, M.D., Research Associate in Medicine (resigned October 31, 1965).
- MUNEHIKO YUKIOKA, M.D., PH.D., Research Associate in Medicine (from February 1, 1966).
- LEONA R. NORMAN ZARSKY, M.D., Research Associate in Medicine.
- AMERICO ABBRUZZESE, M.D., Instructor in Medicine.
- IRVING P. ACKERMAN, M.D., Instructor in Medicine.
- DAVID H. ALPERS, M.D., Instructor in Medicine.
- GEORGE P. BAKER, JR., M.D., Instructor in Medicine.
- VICTOR G. BALBONI, M.D., Instructor in Medicine.
- EDGAR D. BELL, JR., M.D., Instructor in Medicine.
- PATRICIA H. BENEDICT, M.D., Instructor in Medicine.
- JOHN M. BENNETT, M.D., Instructor in Medicine.
- LEWIS E. BRAVERMAN, M.D., Instructor in Medicine.
- CAESAR BRIEFER, JR., M.D., Instructor in Medicine.
- ROBERT E. BROWNLEE, M.D., Instructor in Medicine.
- JOHN B. CADIGAN, JR., M.D., Instructor in Medicine.
- EDMUND J. CALLAHAN, 3RD, M.D., Instructor in Medicine.
- ROBERT W. CAREY, M.D., Instructor in Medicine (from August 1, 1965).
- WALTER H. CASKEY, M.D., Instructor in Medicine.
- JOHN W. CASS, JR., PH.D., M.D., Instructor in Medicine.

HARVARD MEDICAL SCHOOL

- MORTIMER M. CIVAN, M.D., Instructor in Medicine (from January 1, 1966).
- MILTON H. CLIFFORD, M.D., Instructor in Medicine.
- AUGUSTUS T. CROCKER, M.D., Instructor in Medicine.
- SETH C. CROCKER, M.D., Instructor in Medicine.
- JAMES F. CUMMINS, M.D., Instructor in Medicine.
- ROMAN W. DESANCTIS, M.D., Instructor in Medicine.
- JEROME W. FISCHBEIN, M.D., Instructor in Medicine.
- GERALD S. FOSTER, M.D., Instructor in Medicine.
- WILLIAM FRANKLIN, M.D., Instructor in Medicine.
- ROBERT K. FUNKHOUSER, M.D., Instructor in Medicine.
- ARTHUR J. GARCEAU, M.D., Instructor in Medicine.
- MEHRAN GOULIAN, M.D., Instructor in Medicine (appointment expired August 31, 1965).
- KENNETH M. GRAHAM, M.D., Instructor in Medicine.
- MORTIMER S. GREENBERG, M.D., Instructor in Medicine.
- JOSEPH S. GRYBOSKI, M.D., Instructor in Medicine.
- EDWARD B. HAGER, M.D., Instructor in Medicine.
- ARTHUR P. HALL, M.D., Instructor in Medicine.
- EARLE I. HAMMER, M.D., Instructor in Medicine.
- DOROTHEA E. W. HELLMAN, M.D., Instructor in Medicine.
- EMANUEL S. HELLMAN, M.D., Instructor in Medicine.
- MANUEL G. HERRERA-ACENA, M.D., Instructor in Medicine (resigned January 31, 1966).
- CARL A. HIRSCH, M.D., Instructor in Medicine.
- ROBERT B. HOLDEN, M.D., Instructor in Medicine.
- FRANK A. HOWARD, M.D., Instructor in Medicine.
- JAMES H. JACKSON, M.D., Instructor in Medicine.
- HARRY S. JACOB, M.D., Instructor in Medicine.
- ALAN L. KAITZ, M.D., Instructor in Medicine.
- JAY H. KATZ, M.D., Instructor in Medicine.
- SHELDON KAUFMAN, M.D., Instructor in Medicine.
- HOMAYOUN KAZEMI, M.D., Instructor in Medicine.
- MELVIN I. KLAYMAN, M.D., Instructor in Medicine.
- ALLAN KLIMAN, M.D., Instructor in Medicine.

MEDICINE

HUGH H. KOPALD, M.D., Instructor in Medicine (from January 1, 1966).

JULIUS KRITZMAN, M.D., Instructor in Medicine.

TING-KAI LI, M.D., Instructor in Medicine.

NORMAN S. LICHTENSTEIN, M.D., Instructor in Medicine (resigned February 15, 1966).

ARTHUR J. LOCKHART, M.D., Instructor in Medicine.

JASON E. LUCAS, D.M.D., M.D., Instructor in Medicine.

GEORGE W. LYNCH, M.D., Instructor in Medicine.

JOSEPH E. MACKIE, M.D., Instructor in Medicine.

JAMES S. MANSFIELD, M.D., Instructor in Medicine.

EDWIN P. MAYNARD, 3RD, M.D., Instructor in Medicine.

L. TILLMAN MCDANIEL, M.D., Instructor in Medicine.

WILLIAM F. MCNEELY, M.D., Instructor in Medicine.

AVARD M. MITCHELL, PH.D., M.D., Instructor in Medicine.

ROBERT S. MORRISON, M.D., Instructor in Medicine.

HYMAN L. NATERMAN, M.D., Instructor in Medicine.

H. RICHARD NESSON, M.D., Instructor in Medicine and Tutor in Medical Science.

AVRUM M. NOVITCH, M.D., Instructor in Medicine.

THOMAS F. O'BRIEN, M.D., Instructor in Medicine.

DIARMUID O'MATHUNA, PH.D., Instructor in Mathematical Biology in the Department of Medicine.

CAREY M. PETERS, M.D., Instructor in Medicine.

ARTHUR S. PIER, JR., M.D., Instructor in Medicine.

ROBERT S. PINALS, M.D., Instructor in Medicine.

GERALD R. PLOTKIN, M.D., Instructor in Medicine.

WALTER W. POINT, 3RD, M.D., Instructor in Medicine.

SEARLE B. REES, M.D., Instructor in Medicine.

EDWARD S. RENDALL, M.D., Instructor in Medicine.

ROBERT H. RESNICK, M.D., Instructor in Medicine.

FRANK F. RICHARDS, M.D., Instructor in Medicine.

WILLIAM A. RICHARDS, M.D., Instructor in Medicine.

DWIGHT R. ROBINSON, M.D., Instructor in Medicine.

IRWIN H. ROSENBERG, M.D., Instructor in Medicine.

HARVARD MEDICAL SCHOOL

JEAN D. ROSS, M.D., Instructor in Medicine (resigned December 31, 1965).

THOMAS J. RYAN, M.D., Instructor in Medicine.

SEYMOUR M. SABESIN, M.D., Instructor in Medicine.

ELLIOT L. SAGALL, M.D., Instructor in Medicine.

WALTER T. ST. GOAR, M.D., Instructor in Medicine.

GUILLERMO C. SANCHEZ, M.D., Instructor in Medicine.

CHARLES A. SANDERS, M.D., Instructor in Medicine.

ALLAN I. SANDLER, M.D., Instructor in Medicine.

ARTHUR A. SASAHARA, M.D., Instructor in Medicine.

GORDON A. SAUNDERS, M.D., Instructor in Medicine.

LAWRENCE SAXON, M.D., Instructor in Medicine.

ARNOLD J. SCHECTER, M.D., Instructor in Medicine (resigned September 30, 1965).

STUART F. SCHLOSSMAN, M.D., Instructor in Medicine.

JOHN SCHULMAN, JR., M.D., Instructor in Medicine.

NORMAN J. SELVERSTONE, M.D., Instructor in Medicine.

JOHN S. SOELDNER, M.D., Instructor in Medicine.

WILLIAM D. SOHIER, JR., M.D., Instructor in Medicine.

NORMAN S. STEARNS, M.D., Instructor in Medicine.

HAROLD J. STEIN, M.D., Instructor in Medicine.

SAMUEL W. STEIN, M.D., Instructor in Medicine.

JURGEN STEINKE, M.D., Instructor in Medicine.

LAWRENCE I. STELLAR, M.D., Instructor in Medicine.

ROBERT H. TALKOV, M.D., Instructor in Medicine.

DONALD A. TUCKER, M.D., Instructor in Medicine.

ROBERT B. ULLIAN, M.D., Instructor in Medicine.

JOHN C. WELLS, JR., M.D., Instructor in Medicine.

SIDNEY J. WINAWER, M.D., Instructor in Medicine.

KENNETH A. WOEBER, M.B., Ch.B., Instructor in Medicine.

NICHOLAS A. YANKOPOULOS, M.D., Instructor in Medicine.

SIDNEY ALEXANDER, M.D., Assistant in Medicine.

JOSE BEJAR, M.D., Assistant in Medicine.

WILLIAM H. BIRCHARD, M.D., Assistant in Medicine.

ANTHONY F. H. BRITTEN, M.B., Ch.B., Assistant in Medicine.

JOEL E. CANNILLA, M.D., Assistant in Medicine.

MEDICINE

- ROBERT J. CAREY, M.D., Assistant in Medicine.
MELVIN H. CHALFEN, M.D., Assistant in Medicine.
STAFFORD I. COHEN, M.D., Assistant in Medicine.
FRANCIS J. DONOVAN, M.D., Assistant in Medicine.
KENNETH FREMONT-SMITH, M.D., Assistant in Medicine.
JOEL C. GOLDTHWAIT, M.D., Assistant in Medicine.
MICHAEL A. GRAVALLESE, JR., M.D., Assistant in Medicine.
THOMAS HARCUS, M.B., CH.B., Assistant in Medicine.
TEODORO HERSKOVIC, M.D., Assistant in Medicine (from September 1, 1965).
ERNEST A. HIGGINS, JR., M.D., Assistant in Medicine.
NEWTON E. HYSLOP, M.D., Assistant in Medicine.
MANSOUR JABBARI, M.D., Assistant in Medicine.
CHARLES S. KEEVIL, JR., M.D., Assistant in Medicine.
CHRISTIAN L. KHUNG, M.D., Assistant in Medicine.
GEORGE P. KOZAK, M.D., Assistant in Medicine.
OLIVER S. LELAND, JR., M.D., Assistant in Medicine.
DONALD McCAUGHAN, M.D., Assistant in Medicine.
RICHARD S. MCCRAY, M.D., Assistant in Medicine.
EDWARD W. MOORE, M.D., Assistant in Medicine.
ROBERT L. MORSE, M.D., Assistant in Medicine.
JOHN H. MOXLEY, 3RD., M.D., Assistant in Medicine.
RICHARD K. MYLER, M.D., Assistant in Medicine (from January 1, 1966).
LARRY NATHANSON, M.D., Assistant in Medicine.
ROBERT K. OSBORNE, M.D., Assistant in Medicine.
DAVID PAINE, M.D., Assistant in Medicine.
ALFRED F. PARISI, M.D., Assistant in Medicine.
NELSON PEREZ-TRUJILLO, M.D., Assistant in Medicine.
JOSEPH PINES, M.D., Assistant in Medicine.
ANTHONY J. PIRO, M.D., Assistant in Medicine (from January 1, 1966).
SHOLEM POSTEL, M.D., Assistant in Medicine.
RICHMOND PRESCOTT, M.D., Assistant in Medicine.
SHAUN RUDDY, M.D., Assistant in Medicine.
ROBERT H. SCHAPIRO, M.D., Assistant in Medicine.

HARVARD MEDICAL SCHOOL

- JULES R. SCHWABER, M.D., Assistant in Medicine.
JAMES J. SIDD, M.D., Assistant in Medicine.
DAVID L. SINGER, M.D., Assistant in Medicine.
JOHN H. SISSON, M.D., Assistant in Medicine.
OSCAR E. STAROBIN, M.D., Assistant in Medicine.
ROBERT C. STEWART, M.D., Assistant in Medicine.
WILLIAM E. STROLE, JR., M.D., Assistant in Medicine.
ROGER H. SWEET, M.D., Assistant in Medicine.
RICHARD L. TANNEN, M.D., Assistant in Medicine.
RICHARD H. THURM, M.D., Assistant in Medicine.
JOHN H. WILLIAMS, JR., M.D., Assistant in Medicine.
MARTIN J. WOHL, M.D., Assistant in Medicine.
PETER M. YURCHAK, M.D., Assistant in Medicine.
ABDUL B. J. AHMED, M.D., Research Fellow in Medicine.
MOHAMMED AKBARIAN, M.D., Research Fellow in Medicine.
FILOTEO A. ALANO, M.D., Research Fellow in Medicine.
LIA C. ALVAREZ, M.D., Research Fellow in Medicine.
TOSHIO AOYAGI, M.D., Research Fellow in Medicine (from September 1, 1965).
BERNARD M. BABIOR, M.D., Research Fellow in Medicine.
DAVID BAYLINK, M.D., Research Fellow in Medicine.
DIEGO BELLABARBA, M.D., Research Fellow in Medicine.
LOUIS BELLEAU, M.D., Research Fellow in Medicine.
BERNARD W. BENARD, M.D., Research Fellow in Medicine.
MOULAI BENMILOUD, M.D., Research Fellow in Medicine (appointment expired July 31, 1965).
HERBERT BENSON, M.D., Research Fellow in Medicine.
PETER M. BERKMAN, M.D., Research Fellow in Medicine.
JOHN BIENENSTOCK, M.B.B.S., Research Fellow in Medicine.
NAOMI BIEZUNSKI, M.D., Research Fellow in Medicine.
ADIL E. BIRBARI, M.D., Research Fellow in Medicine.
MORTON D. BLAUFOX, M.D., PH.D., Research Fellow in Medicine.
STUART F. BLUM, M.D., Research Fellow in Medicine.
GUNTER BODEN, M.D., Research Fellow in Medicine.
WILLIAM E. BRAUN, M.D., Research Fellow in Medicine.
ROMAINE R. BRUNS, Ph.D., Research Fellow in Medicine.

MEDICINE

- MATTHEW A. BUDD, M.D., Research Fellow in Medicine.
DAVID M. BULL, M.D., Research Fellow in Medicine.
HOWARD F. BUNN, M.D., Research Fellow in Medicine.
HANS R. BURGI, M.D., Research Fellow in Medicine (from January 1, 1966).
PAUL H. BURR, B.S., Research Fellow in Medicine (from January 1, 1966).
EUARDO CARVALLO-GIL, M.D., Research Fellow in Medicine (resigned August 31, 1965).
NARINDER P. S. CHAWLA, M.B., Ch.B., Research Fellow in Medicine.
PHILIP N. CHEIFETZ, M.D., C.M., Research Fellow in Medicine (from August 1, 1965).
MORTIMER M. CIVAN, M.D., Research Fellow in Medicine (through December 31, 1965).
CECIL H. COGGINS, M.D., Research Fellow in Medicine.
HOWARD C. COHEN, M.D., Research Fellow in Medicine.
STEPHEN N. COHEN, M.D., Research Fellow in Medicine.
MARK H. COOLEY, M.D., Research Fellow in Medicine.
STEPHEN J. CURTIS, M.D., Research Fellow in Medicine.
JAMES E. DALEN, M.D., Research Fellow in Medicine.
DHARAM V. DATTA, M.D., Research Fellow in Medicine.
FRANK F. DAVIDOFF, M.D., Research Fellow in Medicine.
RICHARD S. DILLON, M.D., Research Fellow in Medicine (from September 1, 1965).
PATRICIA A. DREWES, Ph.D., Research Fellow in Medicine (from September 1, 1965).
DAVID E. DRUM, M.D., Research Fellow in Medicine.
MARIA L. DUFAU, M.D., Research Fellow in Medicine.
RICHARD J. DUMA, M.D., Research Fellow in Medicine.
ERIC A. ESPINER, M.D., Research Fellow in Medicine (from September 1, 1965).
ERNEST L. FALLEN, M.D., Research Fellow in Medicine.
ALLISON B. FELARCA, M.D., Research Fellow in Medicine.
GORDON G. FORSTNER, M.D., Research Fellow in Medicine.
ROBERT M. FRIEDLER, M.D., Research Fellow in Medicine.

HARVARD MEDICAL SCHOOL

- KENNETH H. GABBAY, M.D., Research Fellow in Medicine.
NORMA GAFFUD, M.D., Research Fellow in Medicine.
JACK M. GEORGE, M.D., Research Fellow in Medicine.
EDMUND H. GESCHICKTER, M.D., Research Fellow in Medicine
(from October 1, 1965).
CARLOS E. GIROD, M.D., Research Fellow in Medicine.
RAY E. GLEASON, PH.D., Research Fellow in Mathematical Biology
in the Department of Medicine.
STEPHEN E. GOLDFINGER, M.D., Research Fellow in Medicine
(from October 1, 1965).
ELLIOT GOLDSTEIN, M.D., Research Fellow in Medicine.
SAMUEL GOLDSTEIN, M.D., Research Fellow in Medicine.
FRIEDRICH A. GRIES, M.D., Research Fellow in Medicine.
CHRISTIAN L. GULBRANDSEN, M.D., Research Fellow in Medicine.
RONALD D. GUTTMANN, M.D., Research Fellow in Medicine.
GARRETT A. HAGEN, M.D., Research Fellow in Medicine.
JOHN A. HAINES, PH.D., Research Fellow in Medicine.
DAVID T. HAMMOND, M.D., Research Fellow in Medicine.
CONSTANTINE L. HAMPERS, M.D., Research Fellow in Medicine.
WILLIAM G. M. HARDISON, M.D., Research Fellow in Medicine.
EXEQUIEL HECKER, M.D., Research Fellow in Medicine.
ROBERT A. HEINLE, M.D., Research Fellow in Medicine.
PHILIP D. HENRY, M.D., Research Fellow in Medicine.
MICHAEL V. HERMAN, M.D., Research Fellow in Medicine.
EMILIO HERRERA, Ph.D., Research Fellow in Medicine (from
September 15, 1965).
JOHN W. B. HERSHEY, Ph.D., Research Fellow in Medicine (from
September 1, 1965).
AKIKO HIGA, Ph.D., Research Fellow in Medicine (resigned
August 31, 1965).
NORMAN K. HOLLENBERG, M.D., PH.D., Research Fellow in Medi-
cine.
FREDERIC G. HOPPIN, JR., M.D., Research Fellow in Medicine.
JEAN-MARIE IDATTE, M.D., Research Fellow in Medicine.
CLAUDE M. JANEWAY, PH.D., Research Fellow in Medicine.
RODOLFO L. JAO, M.D., Research Fellow in Medicine.

MEDICINE

JANAKIRAMAN JAYARAMAN, PH.D., Research Fellow in Medicine
(from January 1, 1966).

RUSSELL L. JEFFERY, M.D., Research Fellow in Medicine.

JOHN J. JEFFREY, JR., PH.D., Research Fellow in Medicine.

CHARLES B. KAHN, M.D., Research Fellow in Medicine (from
January 1, 1966).

DONALD E. KAMM, M.D., Research Fellow in Medicine.

PAUL A. KANTROWITZ, M.D., Research Fellow in Medicine.

BORISLAV T. KARANFILSKI, M.D., Research Fellow in Medicine
(resigned August 31, 1965).

YASHWANT D. KARKHANIS, PH.D., Research Fellow in Medicine.

MADHUKAR G. KARMARKAR, PH.D., Research Fellow in Medicine.

ALAN S. KEITT, M.D., Research Fellow in Medicine.

HARVEY G. KEMP, JR., M.D., Research Fellow in Medicine.

ULRICH R. KLEEGERG, M.D., Research Fellow in Medicine.

MICHAEL D. KLEIN, M.D., Research Fellow in Medicine (appoint-
ment expired December 31, 1965).

FRANCIS J. LANE, JR., M.D., Research Fellow in Medicine.

FRANK I. LEE, M.B., B.S., Research Fellow in Medicine (resigned
July 31, 1965).

PAUL S. LEVY, SC.D., Research Fellow in Mathematical Biology in
the Department of Medicine (resigned December 31, 1965).

EDMUND J. LEWIS, M.D., Research Fellow in Medicine.

PRISCILLA N. LIGOT, M.D., Research Fellow in Medicine.

DAVID M. LINEKIN, PH.D., Research Fellow in Medicine (from
August 1, 1965).

ALBERT F. LOBUGLIO, M.D., Research Fellow in Medicine.

WILHELM F. LUBBE, M.D., Research Fellow in Medicine.

JOSEPH ANTHONY MARTINO, M.D., Research Fellow in Medicine.

VIRENDRA S. MATHUR, M.D., Research Fellow in Medicine (ap-
pointment expired December 31, 1965).

KEITH M. McDONALD, M.D., Research Fellow in Medicine.

ANTONE A. MEDEIROS, M.D., Research Fellow in Medicine.

GERALD MEDOFF, M.D., Research Fellow in Medicine.

JACK MENDELSON, M.D., Research Fellow in Medicine.

EISHI MIKI, M.D., Research Fellow in Medicine.

HARVARD MEDICAL SCHOOL

- LAWRENCE M. MILLER, M.D., Research Fellow in Medicine.
KOJI MITSUGI, PH.D., Research Fellow in Medicine.
FREDERICK L. MOOLTEN, M.D., Research Fellow in Medicine.
REJEAN MORAIS, PH.D., Research Fellow in Medicine.
ALBERTO MUNOZ, M.D., Research Fellow in Medicine (from October 1, 1965).
SARAH NEVO, M.D., Research Fellow in Medicine (from October 1, 1965).
MAY NING, M.B., B.S., Research Fellow in Medicine.
KANAME ODAKE, M.D., Research Fellow in Medicine (from January 1, 1966).
KAZUTERU OGIHARA, M.D., Research Fellow in Medicine (resigned July 31, 1965).
HIROSHI OHTA, M.D., Research Fellow in Medicine.
ROBERT OUELLETTE, PH.D., Research Fellow in Medicine.
OLIVER E. OWEN, M.D., Research Fellow in Medicine.
DAVID J. PARRY, M.B., B.S., Research Fellow in Medicine (appointment expired August 31, 1965).
VICTOR PARSONS, M.B., CH.B., Research Fellow in Medicine (resigned August 31, 1965).
GEORGE L. PAUK, M.D., Research Fellow in Medicine.
JOSEPH G. PITTMAN, M.D., Research Fellow in Medicine.
BARBARA G. PLAUTH, M.D., Research Fellow in Medicine.
ALBERT L. POLITOFF, M.D., Research Fellow in Medicine (from August 1, 1965).
ELINOR D. U. POWELL, M.D., Research Fellow in Medicine.
EDUARDO PRETELL, M.D., Research Fellow in Medicine.
ALI A. PUR-SHAHRIARI, M.D., Research Fellow in Medicine.
EHSAN-UL-HAQ QURESHI, M.B., B.S., Research Fellow in Medicine.
LUKA RABADJIJA, M.D., Research Fellow in Medicine (from September 15, 1965).
ALBERTO RAMIREZ, M.D., Research Fellow in Medicine.
EUGENIO RASIO, M.D., Research Fellow in Medicine.
ALLA R. REDDY, PH.D., Research Fellow in Medicine (from August 15, 1965).

MEDICINE

MICHAEL K. REES, M.D., M.P.H., Research Fellow in Medicine
(from July 15, 1965).

GARY L. ROBERTSON, M.D., Research Fellow in Medicine.

JOHN B. RODGERS, JR., M.D., Research Fellow in Medicine.

FERNANDO G. ROJAS, M.D., Research Fellow in Medicine (from
September 1, 1965).

BARBARA J. ROSEN, M.D., Research Fellow in Medicine.

STANLEY M. ROSEN, M.B., CH.B., Research Fellow in Medicine.

JUERG-PETER ROSENBUSCH, M.D., Research Fellow in Medicine.

HOWARD E. ROTNER, M.D., Research Fellow in Medicine.

MARK RUDERMAN, M.D., Research Fellow in Medicine.

NEIL B. RUDERMAN, M.D., Research Fellow in Medicine.

TAKAHIRO SAKAI, M.D., Research Fellow in Medicine (resigned
December 31, 1965).

RICHARD SANDLER, M.D., Research Fellow in Medicine.

PREM SAGAR SARIN, PH.D., Research Fellow in Medicine (re-
signed September 3, 1965).

BADRI N. SAXENA, M.D., Research Fellow in Medicine.

KLAUS F. R. SCHILLER, M.B., CH.B., Research Fellow in Medicine
(from November 1, 1965).

PETER SCHOFIELD, D.PHIL., Research Fellow in Medicine (from
January 1, 1966).

ROBERT W. SCHRIER, M.D., Research Fellow in Medicine.

HARRY R. SCHUMACHER, M.D., Research Fellow in Medicine.

DANIEL C. SHANNON, M.D., Research Fellow in Medicine.

MICHAEL R. SHARON, M.D., Research Fellow in Medicine.

THOMAS F. SHERMAN, PH.D., Research Fellow in Mathematical
Biology in the Department of Medicine.

SHMUEL SHOSHAN, PH.D., Research Fellow in Medicine (resigned
August 31, 1965).

MARTIN J. SMITH, M.D., Research Fellow in Medicine.

DONALD SNYDER, M.D., Research Fellow in Medicine.

LOUIS M. SNYDER, M.D., Research Fellow in Medicine.

EDWARD L. SOCOLOW, M.D., Research Fellow in Medicine.

DANIEL J. STECHSCHULTE, M.D., Research Fellow in Medicine.

THEODORE L. STECK, M.D., Research Fellow in Medicine.

HARVARD MEDICAL SCHOOL

- NEAL H. STEIGBIGEL, M.D., Research Fellow in Medicine.
PAUL D. STEIN, M.D., Research Fellow in Medicine.
JAMES D. STEINBERG, M.D., Research Fellow in Medicine.
JAMES M. STREETO, M.D., Research Fellow in Medicine.
RICHARD R. STREIFF, M.D., Research Fellow in Medicine.
DENISE J. STRIEDER, M.D., Research Fellow in Medicine.
ESTHER A. STROM, M.D., Research Fellow in Medicine.
YOLANDO Q. M. SULIT, M.D., Research Fellow in Medicine.
JAY M. SULLIVAN, M.D., Research Fellow in Medicine.
KAY TANAKA, M.D., Research Fellow in Medicine.
GILBERT T. THIEL, M.D., Research Fellow in Medicine.
DOUGLAS H. THOMSON, PH.D., Research Fellow in Medicine (resigned November 30, 1965).
JEREMIEH G. TILLES, M.D., Research Fellow in Medicine (appointment expired September 30, 1965).
GERARD TREMBLAY, M.D., Research Fellow in Medicine.
JOHN S. TRYPHONOPOULOS, M.D., Research Fellow in Medicine.
JOSEPH R. TUCCI, M.D., Research Fellow in Medicine.
MOHAMMED M. UWAYDAH, M.D., Research Fellow in Medicine.
MARTIN D. VALENTINE, M.D., Research Fellow in Medicine.
MICHAEL B. VALLOTTON, M.D., Research Fellow in Medicine.
HARRIS W. VAYO, PH.D., Research Fellow in Mathematical Biology in the Department of Medicine (appointment expired August 31, 1965).
LEONARD VINNICK, M.D., Research Fellow in Medicine.
IAN L. WEATHERALL, PH.D., Research Fellow in Medicine (from September 15, 1965).
DALE A. WEBSTER, PH.D., Research Fellow in Medicine (from September 1, 1965).
TA-HSIEN WEI, PH.D., Research Fellow in Medicine (resigned January 31, 1966).
ROBERT F. WILLIAMS, M.D., Research Fellow in Medicine.
DOUGLAS R. WILSON, M.D., Research Fellow in Medicine.
STEPHEN WOLFSON, M.D., Research Fellow in Medicine.
ROSE K. L. WONG, PH.D., M.D., Research Fellow in Medicine (appointment expired July 31, 1965).

MEDICINE

- MARVIN S. WOOL, M.D., Research Fellow in Medicine.
EUGENE A. ABRAMSON, M.D., Teaching Fellow in Medicine.
MORTON E. ALPERT, M.D., Teaching Fellow in Medicine.
RICHARD A. COOPER, M.D., Teaching Fellow in Medicine.
ROBERT B. COPELAND, M.D., Teaching Fellow in Medicine.
HOWARD B. CORNING, M.D., Teaching Fellow in Medicine.
ALBERT R. DEEP, M.D., Teaching Fellow in Medicine.
THEODORE L. DONMOYER, M.D., Teaching Fellow in Medicine.
RICHARD M. FINKEL, M.D., Teaching Fellow in Medicine.
JOHN A. KASTOR, M.D., Teaching Fellow in Medicine.
MAXIMILIAN G. KAULBACH, M.D., Teaching Fellow in Medicine.
HUGH H. KOPALD, M.D., Teaching Fellow in Medicine (appointment expired December 31, 1965).
SUDARSHAN KUMAR, M.D., Teaching Fellow in Medicine.
ALBERT B. LEVIN, M.D., Teaching Fellow in Medicine.
DWIGHT L. MAKOFF, M.D., Teaching Fellow in Medicine.
CHARLES E. MCCALL, M.D., Teaching Fellow in Medicine.
RICHARD K. MYLER, M.D., Teaching Fellow in Medicine (through December 31, 1966).
ROBERT K. OCKNER, M.D., Teaching Fellow in Medicine.
WONG C. PING, M.D., Teaching Fellow in Medicine (from October 1, 1965).
HOWARD E. ROSEN, M.D., Teaching Fellow in Medicine.
DAVID S. ROSENTHAL, M.D., Teaching Fellow in Medicine.
LARRY G. SEIDL, M.D., Teaching Fellow in Medicine.
WILLIAM B. STASON, M.D., Teaching Fellow in Medicine.
SAMUEL O. THIER, M.D., Teaching Fellow in Medicine (from January 1, 1966).
PETER V. TISHLER, M.D., Teaching Fellow in Medicine.
-

Affiliated:

- NEIL L. CRONE, M.D., Professor of Business Administration, and Director of the Business School Health Service.
DANA L. FARNSWORTH, M.D., Henry K. Oliver Professor of Hygiene, and Director of University Health Services.

HARVARD MEDICAL SCHOOL

HERMAN M. KALCKAR, M.D., PH.D., Professor of Biological Chemistry at the Massachusetts General Hospital.

LEWIS L. ENGEL, PH.D., Associate Professor of Biological Chemistry, and Permanent Faculty Fellow of the American Cancer Society.

HENRY M. FOX, M.D., Associate Clinical Professor of Psychiatry.

ROGER W. JEANLOZ, D.Sc., Associate Professor of Biological Chemistry at the Massachusetts General Hospital.

EDWARD H. KASS, PH.D., M.D., Associate Professor of Bacteriology and Immunology.

EDGAR B. TAFT, M.D., Associate Clinical Professor of Pathology.

STANLEY J. ADELSTEIN, M.D., Philip H. Cook Fellow in Radiology, and Assistant Professor of Anatomy.

SIDNEY LESKOWITZ, PH.D., Assistant Professor of Bacteriology and Immunology at the Massachusetts General Hospital.

SIDNEY V. RIEDER, PH.D., Assistant Professor of Biological Chemistry at the Massachusetts General Hospital.

BENEDICT F. MASSELL, M.D., Lecturer on Pediatrics.

JEROME O. KLEIN, M.D., Associate in Pediatrics and Francis Weld Peabody Fellow in Medicine.

WILLIAM J. REDDY, D.Sc., Associate in Biological Chemistry at the Peter Bent Brigham Hospital.

ANNETTE M. C. RAPIN, PH.D., Research Associate in Biological Chemistry.

Required Courses

The time given to the Department of Medicine begins for the entire class in the second half of the second year and continues thereafter so that each student spends about one third to one quarter of his third and fourth years in the study of medicine. Additional time is provided for instruction in the Departments of Dermatology, and Neurology and Psychiatry. The techniques of instruction by the Department of Medicine include lectures, amphitheatre clinics, laboratory exercises and practical work in out-patient departments and wards. The major teaching is done in the out-patient departments and wards with one to four students per instructor so that (personalized) individual

MEDICINE

teaching is emphasized. Throughout, an effort is made to correlate the clinical aspects of patients with the pathophysiologic disturbances which have resulted in the patient's illness and to establish in the student's mind the importance of care and precision in diagnostic and therapeutic methods as best applied to fellow human beings in our complex society.

MEDICINE. *Second Year.*—During the second half of the second year, the Department of Medicine in cooperation with the Departments of Pathology, Pharmacology, Surgery and others participates in the teaching of pathologic physiology. This course provides an integrated approach to understanding the basic principles of disease and includes intensive instruction in laboratory methods. Accompanying the instruction in pathologic physiology, a course is given in the study of the patient by history taking and physical examination. For this instruction, the students are divided into groups of four and assigned to the four general hospitals.

MEDICINE. *Introduction to the Clinic.*—Beginning in the academic year 1964-1965 the third year was replaced by a twelve week course entitled Introduction to the Clinic. This is planned as an intensive training period to provide the student with the essential information, from the patient and from the laboratory, necessary for evaluation, diagnosis and management of the patient's problems. The class is divided among the four major teaching hospitals and the students spend the entire twelve week period at one institution. The teaching time during this twelve week period is equally divided between Medicine (including Dermatology, Neurology, Pediatrics, and Psychiatry) and Surgery (including Neurosurgery, Obstetrics and Gynecology, Orthopedics, and Urology). The teaching in Medicine is done almost entirely on the wards and in the out-patient clinics, with students assigned individual patients and their physical examinations and history taking supervised by instructors. In addition to the emphasis on obtaining information from the patients, the students, in small groups of two or three, have weekly conferences with their instructors to discuss pathophysiologic and psychopathologic mechanisms pertaining to their patients. Weekly clinics are conducted by the senior medical staff at each hospital for the students assigned to that hospital.

MEDICINE. *Principal Clinical Year.*—Following the Introduction to the Clinic the students enter the Principal Clinical Year, during

HARVARD MEDICAL SCHOOL

which they receive three months of Medicine in one of the four major teaching hospitals. During this period they serve as clinical clerks, functioning together with the intern and resident staff on the wards and in the clinics, and sharing responsibility in the study and treatment of patients under careful supervision. Daily rounds are made with a senior staff physician and patients are presented and thoroughly discussed.

MEDICINE. *Fourth Year Elective Period.*—The last five months, which follow the Principal Clinical Year, have been set aside to allow the student to take courses of his own choosing. The Department of Medicine offers a wide range of elective courses. The courses are of variable duration, from one to five months. Many one month courses are designed to afford the opportunity for students, individually or in small groups, to work in a specialty area of Medicine so as to broaden and deepen their clinical training. Some courses are offered in collaboration with other departments. Opportunities are provided for research within the Department of Medicine and the student who wishes to devote the total period to research may arrange to do so.

Facilities for Instruction

The instruction is given at the Medical School, the Beth Israel Hospital, the Boston City Hospital, the Massachusetts General Hospital and the Peter Bent Brigham Hospital, as well as in several other hospitals devoted to special purposes. In these hospitals abundant and varied clinical material is available for the conduct of numerous exercises.

SECOND YEAR

HOURS

Pathologic physiology, including lectures and laboratory exercises. Dr. FREIMAN (Department of Pathology), Chairman, and Drs. ABELMANN, K. F. AUSTEN, INGBAR, ISSELBACHER, JANDL, KRANE, and other members of the Department of Medicine together with members of the Departments of Pathology, Pharmacology, Surgery, Obstetrics and Gynecology, Pediatrics, Neurology and Psychiatry, and Radiology. 538

Introductory medicine consists largely of instruction in the examination of the patient. Clinical experience is gained by students in groups of four assigned to each instructor for

MEDICINE

three hours on two mornings a week during the second semester. Dr. CHAPMAN (Chairman) and coordinators at the participating hospitals: Dr. LINENTHAL at the B.I.H.; Dr. KASS at the B.C.H.; Dr. W. H. BAKER at the M.G.H.; and Dr. FRIEND at the P.B.B.H.

Together, these two courses occupy eight half-days per week during the second semester.

INTRODUCTION TO THE CLINIC

Lectures and clinics on selected topics in internal medicine.

Drs. FINLAND, HIATT, LEAF, THORN, and ASSOCIATES.

Exercises in sections are held in the wards and out-patient departments at the general hospitals connected with the Medical School. The coordinator of this instruction is Dr. LEAF. Directly in charge at the B.I.H. is Dr. A. S. FREEDBERG; at the B.C.H., Drs. DAVIDSON and ABELMANN; at the M.G.H., Dr. FOSTER; and at the P.B.B.H., Drs. MERRILL and HICKLER. Students are divided into groups of two or three per instructor and devote one-half of the twelve weeks of Introduction to the Clinic to Medicine.

PRINCIPAL CLINICAL YEAR

Clinical clerkships, three months, at B.I.H. (Dr. HIATT and ASSOCIATES); B.C.H. (Drs. FINLAND, DAVIDSON, and ASSOCIATES); M.G.H. (Dr. LEAF and ASSOCIATES); P.B.B.H. (Drs. THORN, ULMER and ASSOCIATES).

Fourth Year Elective Courses

BLOCK COURSES

- 501M. Infectious Diseases. Dr. FEINGOLD.
- 502M. Hematology I. Drs. ALEXANDER, PECHET, BENNETT, ROBINSON, and SCHLOSSMAN.
- 503M. Gastroenterology I. Drs. ZETZEL, PLOTKIN, BANKS, KLAYMAN, FISCHBEIN, and RESNICK.
- 505M. Vascular Diseases I. Dr. DEYKIN.
- 506M. Cardiology. Drs. A. FREEDBERG, KURLAND, LINENTHAL, ZOLL, and INCHIOSA.
- 507M. Advanced Internal Medicine. Dr. NESSON and the SENIOR VISITING STAFF.

HARVARD MEDICAL SCHOOL

- 508M. Endocrinology and Metabolism. Drs. GOLDBERG and D. HELLMAN.
- 509M. Renal and Electrolyte Disorders. Drs. H. FRAZIER and NESSON.
- 510M. Cardiology I. Drs. ABELMANN, ELLIS, and ASSOCIATES.
- 511M. Diabetes and Metabolism I. Drs. HURWITZ, ARKY, and ASSOCIATES.
- 512M. Endocrinology I. Dr. INGBAR and ASSOCIATES.
- 513M. Hematology I. Drs. JANDL, CASTLE, and ASSOCIATES.
- 514M. Clinical Liver Disease. Dr. DAVIDSON and ASSOCIATES. (*Same course as Pathology 512M.*)
- 515M. Disturbances of Nutrition in Clinical Medicine. Dr. DAVIDSON and ASSOCIATES.
- 516M. Kidney Disease and Electrolyte Metabolism. Dr. EARLEY.
- 517M. Cardiovascular Disease I. Drs. HABER, PAGE, W. G. AUSTEN, and ASSOCIATES.
- 518M. Diabetes I. Dr. FIELD and ASSOCIATES.
- 519M. Gastrointestinal Diseases I. Dr. ISSELBACHER and ASSOCIATES.
- 520M. Hematology. Dr. BECK and ASSOCIATES.
- 521M. Pulmonary Diseases I. Dr. K. F. AUSTEN and ASSOCIATES.
- 522M. Renal Diseases I. Dr. LEAF and ASSOCIATES.
- 523M. Thyroid Disease I. Dr. STANBURY and ASSOCIATES.
- 524M. Arthritis I. Dr. KRANE and ASSOCIATES.
- 525M. Endocrinology I. Dr. FEDERMAN and ASSOCIATES.
- 526M. General Endocrinology. Dr. FEDERMAN and ASSOCIATES.
- 527M. Infectious Disease I. Dr. SWARTZ and ASSOCIATES.
- 528M. Cardiology and Cardiovascular Regulation. Drs. GORLIN, HICKLER, and LAULER.
- 529M. Clinical Cardiology. Drs. DEXTER and GORLIN.
- 530M. Endocrinology — Metabolism. Dr. CAHILL.
- 531M. Endocrinology — Diabetes Mellitus. Dr. MARBLE.
- 532M. Endocrinology — Metabolism. Dr. DINGMAN.
- 533M. Endocrinology — Metabolism. Drs. LAULER and THORN.
- 534M. Endocrinology — Metabolism. Dr. SELENKOW.
- 535M. Gastroenterology. Dr. SNODGRASS and ASSOCIATES.
- 536M. Hematology. Dr. F. GARDNER.
- 537M. Microbiology. Dr. O'BRIEN.
- 538M. Renal and Cardiorenal. Dr. MERRILL.
- 539M. Comprehensive Medical Care I. Drs. FARNSWORTH, PROUT, CRONE, POSTEL, and ASSOCIATES of the Health Services of Harvard University.
- 540M. Dermatology I. Dr. I. FREEDBERG. (*Same course as Dermatology 501M.*)
- 541M. Functional Anatomy, Biomechanics, and Reconstructive Surgery. Drs. KERMOND and PIERCE. (*Same course as Orthopedic Surgery 504M.*)
- 542M. Advanced Internal Medicine. Dr. FINLAND and ASSOCIATES.
- 543M. Advanced Medicine. Drs. WARTHIN, LITTMANN, SASAHARA, and ASSOCIATES.
- 544M. Cardiology, Electrocardiography. Dr. LITTMANN and ASSOCIATES.
- 545M. Infectious Diseases. Drs. KASS, FINLAND, and ASSOCIATES.

MEDICINE

- 546M. Gastrointestinal Diseases. Drs. ZAMCHECK, DAVIDSON, GOTTLIEB, and ASSOCIATES. (*Same course as Pathology 515M.*)
- 547M. Clinical Clerkship on the Private Services of the M.G.H. Dr. A. KRANES.
- 548M. Clinical Gastrointestinal Disease. Drs. CULVER, ELLIS, and POINT.

BLOCK COURSES — RESEARCH

801. Research in Neoplastic Diseases. Drs. HIATT, HENSHAW, and HIRSCH.
802. Hematology II. Drs. ALEXANDER, PECHET, BENNETT, ROBINSON, and SCHLOSSMAN.
803. Gastroenterology II. Dr. PLOTKIN.
805. Vascular Diseases II. Dr. DEYKIN.
806. Cardiac Research. Biochemistry of Cardiac Muscle Proteins. Dr. INCHIOSA.
807. Cardiac Research. Experimental Hemodynamics in Altered Metabolic States. Drs. KURLAND and A. FREEDBERG.
808. Cardiac Research. Cardiac Rhythmicity. Drs. ZOLL and LINENTHAL.
809. Research in Endocrinology. Dr. GOLDBERG.
810. Research in Renal and Electrolyte Disorders. Dr. FRAZIER.
811. Bacteriology and Immunology. Dr. KASS and ASSOCIATES.
812. Cardiology II. Dr. ABELMANN and ASSOCIATES.
813. Diabetes and Metabolism II. Dr. FREINKEL and ASSOCIATES.
814. Endocrinology II. Dr. INGBAR and ASSOCIATES.
815. Hematology II. Drs. JANDL, CASTLE, and ASSOCIATES.
816. Pathophysiology of Liver Disease. Drs. DAVIDSON, McDERMOTT, and ASSOCIATES. (*Same course as Surgery 815.*)
817. Nutritional Disease. Dr. DAVIDSON and ASSOCIATES.
818. Renal Diseases and Electrolytes. Dr. EARLEY.
819. Cardiovascular Diseases II. Drs. HABER, PAGE, W. G. AUSTEN, and ASSOCIATES.
820. Diabetes II. Dr. FIELD and ASSOCIATES.
821. Gastrointestinal Diseases II. Dr. ISSELBACHER and ASSOCIATES.
822. Hypertension. Dr. PAGE and ASSOCIATES.
823. Pulmonary Diseases II. Dr. K. F. AUSTEN and ASSOCIATES.
824. Renal Diseases II. Dr. LEAF and ASSOCIATES.
825. Thyroid Disease II. Dr. STANBURY and ASSOCIATES.
826. Arthritis II. Dr. KRANE and ASSOCIATES.
827. Endocrinology II. Dr. FEDERMAN and ASSOCIATES.
828. Infectious Disease II. Dr. SWARTZ and ASSOCIATES.
829. Immunochemistry. Dr. HARTER.
830. Hypertension. Dr. HICKLER.
831. Endocrinology — Metabolism. Dr. CAHILL.
832. Endocrinology — Metabolism. Dr. DINGMAN.
833. Endocrinology — Metabolism. Drs. LAULER and THORN.
834. Endocrinology — Metabolism. Dr. NICHOLS.
835. Endocrinology — Metabolism. Dr. SELENKOW.
836. Research in Mathematical Biology. Dr. BARTHOLOMAY.

HARVARD MEDICAL SCHOOL

- 837. Microbiology. Dr. O'BRIEN.
- 838. Dermatology II. Dr. I. FREEDBERG. (*Same course as Dermatology 801.*)
- 839. Gastrointestinal Disease II. Drs. ZAMCHECK, DAVIDSON, and ASSOCIATES. (*Same course as Pathology 806.*)
- 840. Medical Applications in Computer Sciences. Dr. BARNETT and STAFF.

LONGITUDINAL COURSES

- 701. Advances in Medicine.
- 702. Advanced Pathophysiology. Dr. FINLAND and ASSOCIATES.
- 703. Atopic Allergic Disease. Dr. LOWELL and ASSOCIATES.
- 704. Allergy. Dr. HARTER.
- 705. Electrocardiography. Dr. H. D. LEVINE.
- 706. Microcirculation and Blood Rheology. Dr. WELLS.
- 707. Endocrinology — Metabolism. Dr. EMERSON.
- 708. Endocrinology — Metabolism. Drs. LAULER and THORN.
- 709. Advanced Endocrinology. Drs. THORN, MOORE, EMERSON, HARRISON, LAULER, MATSON, SELENKOW, and WILSON. (*Same course as Surgery 708.*)
- 710. Biomathematics. Dr. BARTHOLOMAY.
- 711. Computer Methods. Dr. BARTHOLOMAY.
- 712. Internal Medicine — Ambulatory Clinic. Drs. WALKER and RABIN.
- 713. Pulmonary Disease. Dr. WELLS.
- 714. Comprehensive Medical Care II. Drs. FARNSWORTH, PROUT, CRONE, POSTEL, and ASSOCIATES of the Health Services of Harvard University.
- 715. Clinical and Investigative Gastroenterology. Drs. OSBORNE, ZAMCHECK, and ASSOCIATES. (*Same course as Surgery 703.*)
- 716. Pharmacotherapeutics. Dr. KOCH-WESER, ASSOCIATES, and MEMBERS OF THE DEPARTMENT OF MEDICINE. (*Same course as Pharmacology 702.*)
- 717. Advanced Cardioangiopathy. Drs. R. WARREN, DEXTER, HARKEN, GORLIN, and CRANE. (*Same course as Surgery 705.*)

NEUROLOGY

DEPARTMENT OF NEUROLOGY

- RAYMOND D. ADAMS, M.D., A.M., (hon.), Bullard Professor of Neuropathology, and Head of the Department of Neurology at the Massachusetts General Hospital and Chairman of the Executive Committee of the Department of Neurology.
- CHARLES F. BARLOW, M.D., A.M. (hon.), Bronson Crothers Professor of Neurology and Head of the Department at The Children's Hospital.
- DEREK E. DENNY-BROWN, Dr. Phil., M.D., A.M. (hon.), James Jackson Putnam Professor of Neurology, Head of the Department at the Boston City Hospital.
- ALFRED POPE, M.D., Professor of Neuropathology at the McLean Hospital.
- JAMES D. ROBERTSON, M.D., Associate Professor of Neuropathology at the McLean Hospital.
- ROBERT S. SCHWAB, M.D., Associate Clinical Professor of Neurology.
- PHILIP R. DODGE, M.D., Assistant Professor of Neurology at the Massachusetts General Hospital (on leave September 1, 1965 through June 30, 1966).
- CHARLES M. FISHER, M.D., Assistant Clinical Professor of Neurology.
- SIMEON LOCKE, M.D., Assistant Professor of Neurology.
- CESARE T. LOMBROSO, M.D., Assistant Clinical Professor of Neurology.
- EDWARD P. RICHARDSON, JR., M.D., Assistant Professor of Neuropathology at the Massachusetts General Hospital.
- FLAVIU C. A. ROMANUL, M.D., Assistant Professor of Neurology.
- MURRAY SIDMAN, Ph.D., Assistant Professor of Psychology in the Department of Neurology at the Massachusetts General Hospital.
- RICHARD L. SIDMAN, M.D., Assistant Professor of Neuropathology.
- WILLIAM H. TIMBERLAKE, M.D., Assistant Clinical Professor of Neurology.

HARVARD MEDICAL SCHOOL

- H. RICHARD TYLER, M.D., Assistant Professor of Neurology.
PIERRE M. DREYFUS, M.D., Clinical Associate in Neurology.
SAMUEL H. EPSTEIN, M.D., Clinical Associate in Neurology.
RICHARD F. MAYER, M.D., Associate in Neurology (resigned December 31, 1965).
HUGO W. MOSER, M.D., Associate in Neurology at the Massachusetts General Hospital.
HENRY DE F. WEBSTER, M.D., Associate in Neurology at the Massachusetts General Hospital.
JOHN S. BARLOW, S.M., M.D., Research Associate in Neurology.
MARY L. S. EFRON, M.D., Research Associate in Neurology.
HELEN H. HESS, M.D., Research Associate in Neuropathology.
BRUCE W. KONIGSMARK, M.D., Research Associate in Neuropathology.
JEANNE-CLAUDIE LARROCHE, M.D., Research Associate in Neuropathology (from January 1, 1966).
HARRY A. MACKAY, PH.D., Research Associate in Psychology in the Department of Neurology.
REMEDIOS K. ROSALES, M.D., Research Associate in Neuropathology.
MARIA Z. SALAM, M.D., Research Associate in Neuropathology.
LAWRENCE T. STODDARD, PH.D., Research Associate in Psychology in the Department of Neurology.
ABRAHAM TOWBIN, M.D., Research Associate in Neuropathology.
BARRY G. W. ARNASON, M.D., Instructor in Neurology.
ARTHUR K. ASBURY, M.D., Instructor in Neurology.
MANDEL E. COHEN, M.D., Instructor in Neurology.
DAVID M. DAWSON, M.D., Instructor in Neurology.
ALBERT C. ENGLAND, JR., M.D., Instructor in Neurology.
ROBERT G. FELDMAN, M.D., Instructor in Neurology.
FLOYD H. GILLES, M.D., Instructor in Neurology.
SID GILMAN, M.D., Instructor in Neurology.
MAX GOLDMAN, M.D., Instructor in Neurology (died August 25 1965).
PETER R. HUTTENLOCHER, M.D., Instructor in Neurology.
CHARLES A. KANE, M.D., Instructor in Neurology.

NEUROLOGY

- CHAIM I. MAYMAN, M.D., Instructor in Neurology.
LEONARD D. OSLER, M.B., CH.B., Instructor in Neurology.
DONALD H. OSTERBERG, M.D., Instructor in Neurology.
VINCENT P. PERLO, M.D., Instructor in Neurology.
ERNEST H. PICARD, M.D., Instructor in Neurology.
FREDERICK J. SAMAHA, M.D., Instructor in Neurology.
MARY L. L. SCHOLL, M.D., Instructor in Neurology.
BERTRAM SELVERSTONE, M.D., Instructor in Neuropathology.
JOHN F. SULLIVAN, M.D., Instructor in Neurology.
KAREL VAN S. TOLL, M.D., Instructor in Neurology.
JOSEPH P. VAN DER MEULEN, M.D., Instructor in Neurology.
GORDON V. WATTERS, M.D., Instructor in Neurology.
GERALD F. WINKLER, M.D., Instructor in Neurology.
THOMAS C. FLEMING, M.D., Assistant in Neurology.
ROBERT E. FLYNN, M.D., Assistant in Neurology.
EDWARD L. HOGAN, M.D., Assistant in Neurology.
JORDAN JOSEPH, M.D., Assistant in Neurology.
ARNOLD S. KRAVATZ, M.D., Assistant in Neurology.
BENJAMIN MATZILEVICH, M.D., Assistant in Neurology.
PETER B. ROSENBERGER, M.D., Assistant in Neurology.
ALVAN R. SCHWARTZ, M.D., Assistant in Neurology.
JOHN P. ALLEN, M.D., Research Fellow in Neurology.
JOHN R. BARINGER, M.D., Research Fellow in Neurology.
JOHN W. BENTON, M.D., Research Fellow in Neuropathology (appointment expired December 31, 1965).
RICHARD P. BOGGS, M.D., Research Fellow in Neurology (from August 1, 1965).
VERNE S. CAVINESS, JR., M.D., Research Fellow in Neuropathology.
THOMAS N. CHASE, M.D., Research Fellow in Neurology.
MICHAEL E. COHEN, M.D., Research Fellow in Neurology.
ROBERT W. P. CUTLER, M.D., Research Fellow in Neurology.
GEORGE R. DELONG, M.D., Research Fellow in Neurology.
LAURENT DESCARRIES, M.D., Research Fellow in Neuropathology.
RUTHMARY K. DEUEL, M.D., Research Fellow in Neurology.

HARVARD MEDICAL SCHOOL

- FRANK H. DUFFY, M.D., Research Fellow in Neurology (from January 1, 1966).
- JOHN M. EATON, M.D., Research Fellow in Neurology.
- OVIDIO D. ESCALANTE, M.D., Research Fellow in Neurology (resigned October 31, 1965).
- MICHAEL L. FINERTY, M.D., Research Fellow in Neurology.
- DONALD J. FISHMAN, M.D., Research Fellow in Neurology.
- ANIBAL T. GARCIA, M.D., Research Fellow in Neurology.
- PAUL GERTLER, M.D., Research Fellow in Neurology.
- FRANCINE GORCE, M.D., Research Fellow in Neuropathology (appointment expired August 31, 1965).
- JOHN P. GREENBERG, M.D., Research Fellow in Neurology.
- JOHN F. GRIFFITH, M.D., Research Fellow in Neurology.
- JOHN P. HAMMERSTAD, M.D., Research Fellow in Neurology.
- REBECCA A. HANSON, M.D., Research Fellow in Neurology.
- ROBERT E. HAYES, 3D, M.D., Research Fellow in Neuropathology (died July 14, 1965).
- KLAUS-PETER HERBERG, M.D. (equiv.), Research Fellow in Neurology (from March 15, 1966).
- PALLE F. JUUL-JENSEN, M.D., Research Fellow in Neurology.
- BYRON A. KAKULAS, M.B., B.S., Research Fellow in Neuropathology (appointment expired August 31, 1965).
- THOMAS L. KEMPER, M.D., Research Fellow in Neurology.
- ROBERT KIM, M.D., Research Fellow in Neurology.
- EDWIN H. KOLODNY, M.D., Research Fellow in Neuropathology.
- ANTONIO V. LORENZO, B.S., Research Fellow in Neurology.
- JOEST W. MARTINIUS, M.D., Research Fellow in Neurology.
- WILLIAM I. McDONALD, M.B., CH.B., Research Fellow in Neurology (from September 15, 1965).
- DALE E. MCFARLIN, M.D., Research Fellow in Neurology.
- JAMES G. MCLEOD, M.B., B.S., DR. PHIL., Research Fellow in Neurology (from September 15, 1965).
- HUBERT S. MICKEL, M.D., Research Fellow in Neurology.
- EDUARDO MIRABAL-FONT, M.D., Research Fellow in Neuropathology.
- MICHAEL J. MOORE, M.D., Research Fellow in Neurology.

NEUROLOGY

- ANDREA H. NASH, M.D., Research Fellow in Neurology.
WILLIAM H. OLSON, JR., M.D., Research Fellow in Neurology.
ALAN L. PEARLMAN, M.D., Research Fellow in Neuropathology.
MARTIN POLLOCK, M.D., Research Fellow in Neurology.
ARTHUR L. PRENSKY, M.D., Research Fellow in Neurology.
DONALD L. PRICE, M.D., Research Fellow in Neurology.
MARTIN C. RAFF, M.D., Research Fellow in Neurology.
NORMAN P. ROSMAN, M.D., C.M., Research Fellow in Neuropathology.
JEAN J. RUBEIZ, M.D., Research Fellow in Neuropathology.
THOMAS D. SABIN, M.D., Research Fellow in Neurology.
VIRILIO E. SANGALANG, M.D., Research Fellow in Neuropathology.
ROBERT M. SATOVICK, M.D., Research Fellow in Neurology.
SHIN-ICHIRO SHIMIZU, M.D., Milton Research Fellow in Neurology (from September 15, 1965).
VINCENT P. SWEENEY, M.B., CH.B., Research Fellow in Neurology.
DENNIS D. THOEN, M.D., Research Fellow in Neurology.
ANTONIO J. VITUG, M.D., Research Fellow in Neurology.
FREDERICK Q. VROOM, M.D., Research Fellow in Neurology.
STEPHEN L. WANGER, M.D., Research Fellow in Neurology.
PHILIP A. WOLF, M.D., Research Fellow in Neuropathology.
ROBERT R. YOUNG, M.D., Research Fellow in Neurology (appointment expired August 31, 1965).
LAWRENCE S. ZIVIN, M.D., Research Fellow in Neurology.

Required Courses

NEUROLOGY. *Second Year.*—Clinical lectures are given at the Boston City and Massachusetts General Hospitals to the entire class. The object of the course is to give the student a general knowledge of the principles of diagnosis of diseases of the nervous system as a preparation for later work.

NEUROLOGY. *Introduction to the Clinic.*—Individual instruction in

HARVARD MEDICAL SCHOOL

case taking will be given during that part of the twelve-week period assigned to Medicine. Each student will spend approximately six four-hour sessions with his instructor, and will have two orientation lectures in addition.

NEUROLOGY. *Principal Clinical Year.*—A three-week clerkship is required of each student during the Principal Clinical Year and it may be taken at the B.C.H., M.G.H., or C.H.M.C.-P.B.B.H. For this work the more didactic teaching of the second year serves as a necessary preparation. The work is practical in character and brings the student into immediate contact with patients.

SECOND YEAR

HOURS

Clinical lectures. Dr. DENNY-BROWN, B.C.H. and Dr. ADAMS, M.G.H. and STAFF. 10

INTRODUCTION TO THE CLINIC

Clinical instruction. Dr. DENNY-BROWN, B.C.H. and Dr. ADAMS, M.G.H. and Dr. C. F. BARLOW, C.H.M.C. 26

PRINCIPAL CLINICAL YEAR

Clinical Clerkship. Dr. DENNY-BROWN, B.C.H., Dr. ADAMS, M.G.H., and Dr. C. F. BARLOW, C.H.M.C. 120

Fourth Year Elective Courses

BLOCK COURSES

- 501M. Advanced Study in Clinical Neurology. Dr. DENNY-BROWN.
- 502M. Advanced Study of Neuropathology. Dr. ROMANUL. (*Same course as Pathology 513M.*)
- 503M. Pediatric Neurology. Dr. C. BARLOW. (*Same course as Pediatrics 517M.*)
- 504M. Advanced Study in Clinical Neurology. Dr. TIMBERLAKE.
- 505M. Advanced Study in Clinical Neurology. Dr. R. D. ADAMS.
- 506M. Pediatric Neurology I. Dr. DODGE. (*Same course as Pediatrics 522M.*)
- 507M. Pediatric Neurology II. Dr. DODGE. (*Same course as Pediatrics 523M.*)
- 508M. Pediatric Neurology. Dr. MOSER. (*Same course as Pediatrics 524M.*)
- 509M. Advanced Study in Neuropathology. Dr. E. P. RICHARDSON. (*Same course as Pathology 514M.*)
- 510M. Advanced Study in Clinical Neurology. Dr. TYLER.

NEUROLOGY

- 511M. Neurology and Preventive Medicine. Dr. POSKANZER. (*Same course as Preventive Medicine 504M.*)
 512M. Advanced Studies in Seizure Disorders. Dr. LOMBROSO.

BLOCK COURSES — RESEARCH

- 530M. Survey Course in Neurological Sciences, Including Participation in Research in one Special Area.
 801. Advanced Research on Histochemistry of Nerve and Muscle. Dr. ROMANUL.
 802. Advanced Research on Neurophysiology of the Motor System. Dr. DENNY-BROWN.
 803. Studies in Neuromuscular Transmission. Dr. LOCKE.
 805. Advanced Research in Blood-Brain Barrier and Related Subjects. Dr. C. F. BARLOW.
 806. Biophysics in Neurology (computer techniques). Dr. J. S. BARLOW.
 807. Histogenesis of the Normal and Diseased Brain. Dr. R. L. SIDMAN.
 808. Advanced Neuroanatomy. Dr. YAKOVLEV.
 809. Neuropathology of Developmental Anomalies. Dr. E. P. RICHARDSON.
 810. Electron Microscopic Studies of Nervous Disease. Dr. WEBSTER.
 811. Biochemistry of Nervous Disease. Drs. MOSER, DREYFUS, GERGELY, and EFRON.
 812. Clinical Neurophysiology. Drs. SCHWAB and SCHOLL.
 813. Experimental Clinical Psychology — in Normal and Retarded Children. Drs. STODDARD and M. SIDMAN.
 814. Studies in Vascular Diseases of the Nervous System. Dr. C. M. FISHER.
 815. Microchemical Neuropathology. Drs. POPE, HESS, and MAYMAN.
 816M. Computer Techniques in Clinical Neurophysiology. Drs. LOMBROSO and KRAVITZ.

Neuropathology

Required Course

NEUROPATHOLOGY. *Second Year.* — The course consists of lectures, laboratory work, and demonstrations, amounting to fifty-seven hours. The lectures introduce conceptions of value for the third year courses in neurology and psychiatry and for the neurological parts of courses in internal medicine and in surgery. Microscopical and gross specimens are studied.

SECOND YEAR

HOURS

Lectures and laboratory work. Dr. ADAMS and STAFF. Four times a week, for four and one-half weeks.

57

Fourth Year Elective Courses (See page 162)

HARVARD MEDICAL SCHOOL

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

DUNCAN E. REID, M.D., A.M. (hon.), William Lambert Richardson Professor of Obstetrics, Kate Macy Ladd Professor of Obstetrics and Gynecology, and Head of the Department of Obstetrics and Gynecology.

GEORGE VAN S. SMITH, M.D., W. H. Baker Professor of Gynecology, and Head of the Division of Gynecology.

LANGDON PARSONS, M.D., Clinical Professor of Gynecology and Director of Alumni Relations.

HILTON A. SALHANICK, Ph.D., M.D., Professor of Obstetrics and Gynecology.

SOMERS H. STURGIS, M.D., Clinical Professor of Gynecology.

HOWARD ULFELDER, M.D., Joe Vincent Meigs Professor of Gynecology.

FRANCIS M. INGERSOLL, M.D., Associate Clinical Professor of Gynecology.

DANIEL ABRAMSON, M.D., Assistant Clinical Professor of Obstetrics and Gynecology.

JOSEPH J. BARLOW, M.D., Assistant Professor of Obstetrics and Gynecology.

CHRISTOPHER J. DUNCAN, M.D., Assistant Clinical Professor of Obstetrics and Gynecology.

CHARLES L. EASTERDAY, M.D., Assistant Professor of Obstetrics and Gynecology at the Boston Lying-in Hospital.

THOMAS H. GREEN, JR., M.D., Assistant Clinical Professor of Gynecology.

RICHARD H. GROGAN, M.D., Assistant Clinical Professor of Obstetrics and Gynecology.

ROBERT W. KISTNER, M.D., Assistant Clinical Professor of Obstetrics and Gynecology.

ALAN B. LITTLE, M.D., C.M., Assistant Professor of Obstetrics and Gynecology (resigned January 15, 1966).

OLIVE W. SMITH, Ph.D., Sc.D. (hon.), Assistant Professor of

OBSTETRICS AND GYNECOLOGY

Biological Chemistry in the Department of Obstetrics and Gynecology at the Free Hospital for Women.

MELVIN L. TAYMOR, M.D., Assistant Clinical Professor of Gynecology.

PAUL A. YOUNGE, M.D., Assistant Clinical Professor of Gynecology.

ROBERT H. BARKER, M.D., Clinical Associate in Obstetrics and Gynecology.

CELSO R. GARCÍA, M.D., Clinical Associate in Obstetrics and Gynecology (resigned August 15, 1965).

LUKE GILLESPIE, M.D., Associate in Obstetrics and Gynecology at the Boston Lying-in Hospital.

HOWARD N. JACOBSON, M.D., Associate in Obstetrics and Gynecology (resigned August 31, 1965).

JOHN F. JEWETT, M.D., Clinical Associate in Obstetrics and Gynecology.

WILLIAM J. MULLIGAN, M.D., Clinical Associate in Obstetrics and Gynecology.

HAROLD W. RUBIN, M.D., Clinical Associate in Obstetrics and Gynecology.

WILLIAM C. KEETTEL, M.D., Visiting Lecturer on Obstetrics and Gynecology (October 11 through October 15, 1965).

DAVID H. GALLANT, PH.D., Research Associate in Obstetrics and Gynecology.

JOHN A. MACLAREN, PH.D., Research Associate in Obstetrics and Gynecology.

VOJIN SULOVIC, M.D., Research Associate in Obstetrics and Gynecology (from September 1, 1965).

LEONA R. ZACHARIAS, PH.D., Research Associate in Obstetrics and Gynecology (from January 1, 1966).

THEODORE C. BARTON, M.D., Instructor in Obstetrics and Gynecology and Tutor in Medical Science.

MAURICE O. BELSON, M.D., Instructor in Obstetrics and Gynecology.

A. GORDON GAULD, M.D., Instructor in Obstetrics and Gynecology.

HARVARD MEDICAL SCHOOL

- DONALD P. GOLDSTEIN, M.D., Instructor in Obstetrics and Gynecology.
- ARTHUR C. GORBACH, M.D., Instructor in Obstetrics and Gynecology.
- WARD I. GREGG, M.D., Instructor in Gynecology.
- CHARLES T. GRIFFITHS, M.D., Instructor in Obstetrics and Gynecology.
- ARTHUR L. HERBST, M.D., Instructor in Obstetrics and Gynecology.
- CRAWFORD H. HINMAN, M.D., Instructor in Obstetrics and Gynecology.
- RUBY G. JACKSON, M.D., C.M., Instructor in Obstetrics and Gynecology.
- DAVID E. KOPANS, M.D., Instructor in Obstetrics and Gynecology.
- FRANCIS R. LANE, M.D., Instructor in Obstetrics and Gynecology.
- THOMAS LEAVITT, JR., M.D., Instructor in Obstetrics and Gynecology.
- HERBERT T. LEIGHTON, M.D., Instructor in Obstetrics and Gynecology.
- JACOB MEZER, M.D., Instructor in Obstetrics and Gynecology.
- JOHN L. NEWELL, M.D., Instructor in Obstetrics and Gynecology.
- WESTON F. SEWALL, M.D., Instructor in Obstetrics and Gynecology.
- LLOYD I. SEXTON, M.D., Instructor in Obstetrics and Gynecology.
- BARTLETT H. STONE, M.D., Instructor in Obstetrics and Gynecology.
- ARTHUR W. TUCKER, JR., M.D., Instructor in Obstetrics and Gynecology.
- ALBERT E. WEINER, M.D., Instructor in Obstetrics and Gynecology.
- DAVID WEINTRAUB, M.D., Instructor in Obstetrics and Gynecology.
- CLEMENT YAHIA, M.D., Instructor in Obstetrics and Gynecology.
- JAMES H. AUSTIN, M.D., Assistant in Obstetrics and Gynecology.

OBSTETRICS AND GYNECOLOGY

SAMUEL M. BERGER, M.B., CH.B., Assistant in Obstetrics and Gynecology (from September 1, 1965).

HERBERT E. BROOKS, JR., M.D., Assistant in Obstetrics and Gynecology.

DICK A. J. BROWN, M.D., Assistant in Obstetrics and Gynecology.

ROBERT W. BROWN, M.D., Assistant in Obstetrics and Gynecology.

ROBERT V. DANDROW, JR., M.D., Assistant in Obstetrics and Gynecology.

JOHN J. DRISCOLL, M.D., Assistant in Obstetrics and Gynecology.

THEODORE FAINSTAT, M.D., C.M., Assistant in Obstetrics and Gynecology.

SUMNER GOCHBERG, M.D., Assistant in Obstetrics and Gynecology.

JOHN W. GROVER, M.D., Assistant in Obstetrics and Gynecology.

ALBERT Y. KEVORKIAN, M.D., Assistant in Gynecology.

LAWRENCE J. MALONE, M.D., Assistant in Obstetrics and Gynecology (from January 1, 1966).

JACK H. MARCOVITCH, M.D., Assistant in Obstetrics and Gynecology.

ROBERT MARNOY, M.D., Assistant in Obstetrics and Gynecology.

EDWARD N. MCINTOSH, M.D., Research Fellow in Obstetrics and Gynecology (from January 1, 1966).

JOSEPH H. PHILLIPS, M.D., Assistant in Gynecology.

ELLIOT RIVO, M.D., Assistant in Obstetrics and Gynecology.

PETER G. ROBBINS, M.D., Assistant in Obstetrics and Gynecology.

GEORGE M. RYAN, JR., M.D., Assistant in Obstetrics and Gynecology.

SEYMOUR SACKS, M.D., Assistant in Obstetrics and Gynecology.

LEONARD E. SAFON, M.D., Assistant in Obstetrics and Gynecology.

BERNARDO A. SANTAMARINA, M.D., Assistant in Obstetrics and Gynecology.

ARTHUR J. SCHRAMM, M.D., Assistant in Obstetrics and Gynecology.

ERNEST H. SMITH, M.D., Assistant in Obstetrics and Gynecology.

STEPHEN B. SMITH, M.D., Assistant in Obstetrics and Gynecology.

HARVARD MEDICAL SCHOOL

SUMNER A. SMITH, M.D., Assistant in Obstetrics and Gynecology.
SIDNEY STAHLER, M.D., Assistant in Obstetrics and Gynecology.
JOSEPH S. WALLACE, M.D., Assistant in Obstetrics and Gynecology.

ROBERT E. WHEATLEY, M.D., Assistant in Obstetrics and Gynecology.

BERNARD L. LIEBERMAN, M.D., Research Fellow in Obstetrics and Gynecology.

ROBERT H. MARGULIS, M.D., Research Fellow in Obstetrics and Gynecology (from January 1, 1966).

R. ELGIN McCUTCHEON, M.D., Research Fellow in Obstetrics and Gynecology.

GRANT W. PATTON, JR., Research Fellow in Obstetrics and Gynecology.

RICHARD R. SMITH, M.D., Research Fellow in Obstetrics and Gynecology.

RICHARD H. UNDERWOOD, B.Sc., Research Fellow in Obstetrics and Gynecology.

ERIC C. VAN BOGAERT, M.D., Research Fellow in Obstetrics and Gynecology (from September 1, 1965).

ANN R. B. BARNES, M.D., Teaching Fellow in Obstetrics and Gynecology.

FREDRIC D. FRIGOLETTO, M.D., Teaching Fellow in Obstetrics and Gynecology.

JOHN M. LEVENTHAL, M.D., Teaching Fellow in Obstetrics and Gynecology.

ALLAN G. ROSENFELD, M.D., Teaching Fellow in Obstetrics and Gynecology.

ROBERT L. SHIRLEY, M.D., Teaching Fellow in Obstetrics and Gynecology.

FREDERICK H. SILLMAN, M.D., Teaching Fellow in Obstetrics and Gynecology.

Required Courses

OBSTETRICS AND GYNECOLOGY. *Second Year.* — Whole class exercises in conjunction with the Departments of Medical Science and the

OBSTETRICS AND GYNECOLOGY

several clinical disciplines, covering the broad aspects of the physiology and pathophysiology of reproduction and femaleness. Emphasis is placed on embryology, pathology, and endocrinology of the reproductive systems, both male and female.

OBSTETRICS AND GYNECOLOGY. *Introduction to the Clinic.*—Instruction will be given in participation with other clinical departments.

OBSTETRICS AND GYNECOLOGY. *Principal Clinical Year.*—The student devotes six weeks to clinical Obstetrics and Gynecology at the Boston City Hospital, the Beth Israel Hospital, the Boston Lying-in Hospital, the Free Hospital for Women, and the Massachusetts General Hospital. He participates in the management of labor and delivery and takes part in the care of the mother and her infant during their hospital stay. He also receives instruction in the interaction of medical and surgical disease in pregnancy and in gynecological conditions, and assists at operations. In addition, he attends Obstetric and Medical Grand Rounds, Clinicopathological Conferences, and clinical seminars throughout the course.

SECOND YEAR

HOURS

Participation in pathophysiology endocrine system.	18
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INTRODUCTION TO THE CLINIC

Practical instruction and seminars in clinical obstetrics and gynecology.

PRINCIPAL CLINICAL YEAR

Clinical obstetrics and gynecology. Drs. REID, SMITH, STURGIS, ULFELDER, and ASSOCIATES.

240

Fourth Year Elective Courses

BLOCK COURSES

- 501M. Gynecologic Oncology. Dr. GROGAN.
- 502M. Fertility and Endocrinology. Dr. MULLIGAN.
- 503M. Ovarian Endocrinology. Dr. KISTNER.
- 504M. Gynecologic Radiology. Drs. SOSMAN and TWADDLE.
- 505M. Care of Women. Dr. G. V. SMITH.
- 506M. Obstetrical Anesthesia and Analgesia. Dr. J. B. WEISS.
- 507M. Advanced Obstetrics and Gynecology. Dr. REID and ASSOCIATES.

HARVARD MEDICAL SCHOOL

- 511M. Comprehensive Gynecology. Dr. S. STURGIS. (*Same course as Surgery 524M.*)
- 512M. Gynecologic Endocrinology. Experience in Clinical and Laboratory Diagnosis. Dr. TAYMOR.
- 513M. Endocrinology with Special Reference to the Ovary. Drs. ULFELDER, G. S. RICHARDSON, McARTHUR, and SCULLY. (*Same course as Surgery 507M.*)

BLOCK COURSES — RESEARCH

- 801. Laboratory Course in Ovarian Estrogen Metabolism. Dr. G. S. RICHARDSON.
- 802. Laboratory Instruction in the Use of Tissue Culture in Experimental Embryology. Dr. GROVER.
- 803. Diagnostic Laboratory Methods including Instruction in Laboratory Gonadotrophin Determinations both Biologic and Immunologic, and Steroid Assay. Dr. TAYMOR.
- 804. Biochemistry of Reproduction. Dr. HAGERMAN.
- 805. Clinical Research in Obstetrics and Gynecology. Dr. SALHANICK and ASSOCIATES.
- 806. Basic Research in Obstetrics and Gynecology. Dr. SALHANICK and ASSOCIATES.
- 807. Membrane Permeability. Dr. BARTON.
- 808. Immunologic Aspects of Pregnancy. Dr. MACLAREN.
- 812. Biochemistry of Embryonic Development and Cell Differentiation. Dr. C. A. VILLEE. (*Same course as Biological Chemistry 807.*)

OPHTHALMOLOGY

DEPARTMENT OF OPHTHALMOLOGY

DAVID G. COGAN, M.D., Henry Willard Williams Professor of Ophthalmology, Head of the Department, and Director of the Howe Laboratory of Ophthalmology.

HENRY F. ALLEN, M.D., Associate Clinical Professor of Ophthalmology.

CARL C. JOHNSON, M.D., Associate Clinical Professor of Ophthalmology.

PAUL BOEDER, PH.D., Lecturer on Ophthalmology.

BRENDAN D. LEAHEY, M.D., Clinical Associate in Ophthalmology.

CHARLES L. SCHEPENS, M.D., Clinical Associate in Ophthalmology.

ALFRED W. SCOTT, M.D., Clinical Associate in Ophthalmology.

ALBERT E. SLOANE, M.D., Clinical Associate in Ophthalmology.

TAYLOR R. SMITH, M.D., Clinical Associate in Ophthalmology.

GARRETT L. SULLIVAN, JR., M.D., Clinical Associate in Ophthalmology.

ENDRE A. BALAZS, M.D., Lecturer on Ophthalmology.

RUSSELL L. CARPENTER, PH.D., Lecturer on Ophthalmology.

MAHLON T. EASTON, M.D., Lecturer on Ophthalmology.

ABRAHAM POLLEN, M.D., Lecturer on Ophthalmology.

SAUL A. BORUCHOFF, M.D., Instructor in Ophthalmology.

HARRY E. BRACONIER, M.D., Instructor in Ophthalmology.

ROBERT J. BROCKHURST, M.D., Instructor in Ophthalmology.

THOMAS J. CAVANAUGH, M.D., C.M., Instructor in Ophthalmology.

JULIAN F. CHISHOLM, JR., M.D., Instructor in Ophthalmology.

JOSEPH M. CLOUGH, M.D., Instructor in Ophthalmology.

CLAES-HENRIK DOHLMAN, M.D., PH.D., Instructor in Ophthalmology.

JOHN M. HILL, M.D., Instructor in Ophthalmology.

SUMNER D. LIEBMAN, M.D., Instructor in Ophthalmology.

HENRY A. MOSHER, M.D., Instructor in Ophthalmology.

RICHARD B. PIPPITT, M.D., Instructor in Ophthalmology.

HARVARD MEDICAL SCHOOL

- CHARLES D. J. REGAN, M.D., Instructor in Ophthalmology.
KARL RIEMER, M.D., Instructor in Ophthalmology.
BARUCH J. SACHS, M.D., Instructor in Ophthalmology.
EARL S. SEALE, M.D., Instructor in Ophthalmology.
FRANCIS J. WEST, M.D., Instructor in Ophthalmology.
JEREMY B. WHITNEY, M.D., Instructor in Ophthalmology.
ERNST G. G. WOLF, PH.D., Instructor in Ophthalmology.
LLOYD M. AIELLO, M.D., Assistant in Ophthalmology.
DAVID R. ALPERT, M.D., Assistant in Ophthalmology.
FREDERIC B. BREED, M.D., Assistant in Ophthalmology.
JOHN M. CARROLL, M.D., Assistant in Ophthalmology.
RICHARD B. CHAPMAN, M.D., Assistant in Ophthalmology.
EUGENE C. CICCARELLI, M.D., Assistant in Ophthalmology.
THOMAS P. CRONIN, M.D., Assistant in Ophthalmology.
CARL G. FREESE, JR., M.D., Assistant in Ophthalmology.
JOHN R. GEHRING, M.D., Assistant in Ophthalmology.
WARREN D. HALEY, M.D., Assistant in Ophthalmology.
RALPH H. HINCKLEY, M.D., Assistant in Ophthalmology.
ROLAND E. HOULE, M.D., Assistant in Ophthalmology (from August 1, 1965).
BERNARD T. HUTCHINSON, M.D., Assistant in Ophthalmology.
ROBERT C. LAWLOR, M.D., Assistant in Ophthalmology.
BYRON S. LINGEMAN, M.D., Assistant in Ophthalmology.
JOHN W. McMEEL, M.D., Assistant in Ophthalmology.
GEORGE M. OLIVE, JR., M.D., Assistant in Ophthalmology.
ROBERT A. PETERSEN, M.D., DR.MED.SCI., Assistant in Ophthalmology (from February 1, 1966).
RICHARD M. ROBB, M.D., Assistant in Ophthalmology.
PERRY ROSENTHAL, M.D., Assistant in Ophthalmology.
DAVID H. SCOTT, M.D., Assistant in Ophthalmology.
RICHARD J. SIMMONS, M.D., Assistant in Ophthalmology.
MICHAEL WIEDMAN, M.D., Assistant in Ophthalmology.
ARTHUR M. CLEMENTS, M.D., Research Fellow in Ophthalmology (from January 1, 1966).
WILLIAM J. COLLIS, M.D., Research Fellow in Ophthalmology.

OPHTHALMOLOGY

- ROBERT A. GORN, M.D., Research Fellow in Ophthalmology.
- ROBERT S. HEPLER, M.D., Research Fellow in Ophthalmology.
- IVAR HÖRVEN, M.D., Research Fellow in Ophthalmology (from August 15, 1965).
- JOSEPH MICHON, JR., M.D., Research Fellow in Ophthalmology.
- ANTHONY B. NESBURN, M.D., Research Fellow in Ophthalmology (appointment expired December 31, 1965).
- JOHN W. REED, M.D., Research Fellow in Ophthalmology (from January 1, 1966).
- JOHN A. STANLEY, M.D., Research Fellow in Ophthalmology.
- DAVID M. WORTHEN, M.D., Research Fellow in Ophthalmology (appointment expired September 30, 1966).
- THOMAS A. AABERG, M.D., Teaching Fellow in Ophthalmology (appointment expired January 31, 1966).
- ERNEST H. CHRISTMAN, M.D., Teaching Fellow in Ophthalmology (from January 1, 1966).
- ALBERT R. FREDERICK, JR., Teaching Fellow in Ophthalmology (appointment expired October 31, 1965).
- STEPHEN J. FRICKER, M.D., Teaching Fellow in Ophthalmology (from April 1, 1966).
- GEORGE E. GARCIA, M.D., Teaching Fellow in Ophthalmology (appointment expires April 30, 1966).
- HOWARD M. LEIBOWITZ, M.D., Teaching Fellow in Ophthalmology (from January 1, 1966).
- SIMMONS LESSELL, M.D., Teaching Fellow in Ophthalmology (appointment expires April 30, 1966).
- BERNARD L. MCGOWAN, M.D., Teaching Fellow in Ophthalmology (from October 1, 1965).
- ERNST J. MEYER, M.D., Teaching Fellow in Ophthalmology.
- JAMES A. NIFFENEGER, M.D., Teaching Fellow in Ophthalmology.
- ROBERT A. PETERSEN, M.D., Teaching Fellow in Ophthalmology (through January 31, 1966).
- CHARLES R. ROBERTS, M.D., Teaching Fellow in Ophthalmology (from April 1, 1966).

HARVARD MEDICAL SCHOOL

Required Courses

OPHTHALMOLOGY. *First Year.* — Lectures in anatomy and physiology of the eye.

OPHTHALMOLOGY. *Second Year.* — Lectures in pathology and pharmacology of the eye.

OPHTHALMOLOGY. *Introduction to the Clinic.* — Lectures and laboratory sessions.

OPHTHALMOLOGY. *Principal Clinical Year.* — Clinical Ophthalmology.

INTRODUCTION TO THE CLINIC

HOURS

Lectures and laboratory sessions

9

PRINCIPAL CLINICAL YEAR

Clinical Ophthalmology

40

Fourth Year Elective Courses

BLOCK COURSE

501M. Ophthalmology I. Dr. A. W. SCOTT and ASSOCIATES.

BLOCK COURSE — RESEARCH

801. Ophthalmology II. Drs. COGAN, A. W. SCOTT, and ASSOCIATES.

HOWE LABORATORY OF OPHTHALMOLOGY

DAVID G. COGAN, M.D., Henry Willard Williams Professor of Ophthalmology, Head of the Department, and Director of the Howe Laboratory of Ophthalmology.

W. MORTON GRANT, M.D., Associate Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

JIN H. KINOSHITA, PH.D., Associate Professor of Biochemical Ophthalmology.

DAVID D. DONALDSON, M.D., Assistant Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

SIDNEY FUTTERMAN, PH.D., Assistant Professor of Biological

OPHTHALMOLOGY

Chemistry in the Department of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

CARL KUPFER, M.D., Assistant Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

TOICHIRO KUWABARA, M.D., Assistant Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

JOHN S. ANDREWS, JR., PH.D., Associate in Ophthalmic Research at the Massachusetts Eye and Ear Infirmary.

ABRAHAM SPECTOR, PH.D., Associate in Ophthalmic Research at the Massachusetts Eye and Ear Infirmary (resigned August 31, 1965).

JAMES H. ELLIOTT, M.D., Instructor in Ophthalmology.

ROBERT D. REINECKE, O.D., Instructor in Ophthalmology.

JEREMY B. WHITNEY, M.D., Instructor in Ophthalmology.

EUGENE C. CICCARELLI, M.D., Assistant in Ophthalmology.

The Howe Laboratory of Ophthalmology was founded in 1927 by the late Dr. Lucien Howe. A sum of money equal to that initially given by Dr. Howe was donated by the Rockefeller Foundation. Laboratory space was provided by the Massachusetts Eye and Ear Infirmary.

The purpose of the Laboratory is to advance ophthalmology; its researches are not restricted to any particular phase of this science. Advantage is taken of the rich clinical material of the Infirmary. While the Laboratory is purely an institution for research, the services of the various members of the staff are available for teaching in the Harvard Medical School and for assistance in the clinical work of the Infirmary.

HARVARD MEDICAL SCHOOL

DEPARTMENT OF ORTHOPEDIC SURGERY

MELVIN J. GLIMCHER, M.D., Edith M. Ashley Professor of Orthopedic Surgery, and Head of the Department at the Massachusetts General Hospital.

WILLIAM T. GREEN, M.D., A.M. (hon.), Harriet M. Peabody Professor of Orthopedic Surgery, and Head of the Department at The Children's Hospital.

THORNTON BROWN, M.D., Associate Clinical Professor of Orthopedic Surgery.

OTTO E. AUFRANC, M.D., Assistant Clinical Professor of Orthopedic Surgery.

HENRY H. BANKS, M.D., Assistant Clinical Professor of Orthopedic Surgery.

JONATHAN COHEN, M.D., Assistant Clinical Professor of Orthopedic Surgery.

PAUL W. HUGENBERGER, M.D., Lecturer on Orthopedic Surgery.

WILLIAM H. HARRIS, M.D., Clinical Associate in Orthopedic Surgery.

ARTHUR W. TROTT, M.D., Clinical Associate in Orthopedic Surgery.

ANTHONY L. ANDRIKIDES, PH.D., Research Associate in Biological Chemistry in the Department of Orthopedic Surgery.

CAMILLE J. FRANCOIS, M.D., Research Associate in Orthopedic Surgery.

ELTON P. KATZ, PH.D., Research Associate in Biological Chemistry in the Department of Orthopedic Surgery.

MURRAY V. KING, PH.D., Research Associate in Biological Chemistry in the Department of Orthopedic Surgery.

GERALD L. MECHANIC, PH.D., Research Associate in Biological Chemistry in the Department of Orthopedic Surgery.

DOROTHY F. TRAVIS, PH.D., Research Associate in Biology in the Department of Orthopedic Surgery.

ROBERT J. BOYD, M.D., Instructor in Orthopedic Surgery.

ORTHOPEDIC SURGERY

- ROBERT B. BRENDZE, M.D., Instructor in Orthopedic Surgery.
THOMAS L. DELORME, M.D., Instructor in Orthopedic Surgery.
PAUL P. GRIFFIN, M.D., Instructor in Orthopedic Surgery.
WILLIAM N. JONES, M.D., Instructor in Orthopedic Surgery.
WILLIAM L. KERMOND, M.B., B.S., Instructor in Orthopedic Surgery.
J. DRENNAN LOWELL, M.D., Instructor in Orthopedic Surgery.
WILLIAM R. MACAUSLAND, JR., M.D., Instructor in Orthopedic Surgery.
RICHARD A. MAYO, M.D., Instructor in Orthopedic Surgery.
EDWARD A. NALEBUFF, M.D., Instructor in Orthopedic Surgery.
PAUL I. O'BRIEN, M.D., Instructor in Orthopedic Surgery.
ARTHUR M. PAPPAS, M.D., Instructor in Orthopedic Surgery.
DONALD PIERCE, M.D., Instructor in Orthopedic Surgery.
EUGENE E. RECORD, M.D., Instructor in Orthopedic Surgery.
JOHN A. REIDY, M.D., Instructor in Orthopedic Surgery.
EDWARD J. RISEBOROUGH, M.B., CH.B., Instructor in Orthopedic Surgery.
CARTER R. ROWE, M.D., Instructor in Orthopedic Surgery.
CLEMENT B. SLEDGE, M.D., Instructor in Orthopedic Surgery (from January 1, 1966).
MORTEN SMITH-PETERSEN, M.D., Instructor in Orthopedic Surgery.
WILLIAM G. STEWART, JR., M.D., Instructor in Orthopedic Surgery.
ROBERT ULIN, M.D., Instructor in Orthopedic Surgery.
EDWIN T. WYMAN, JR., M.D., Instructor in Orthopedic Surgery.
FRANK D. BATES, M.D., Assistant in Orthopedic Surgery.
WILLARD E. DOTTER, M.D., Assistant in Orthopedic Surgery.
EDWIN R. GUISE, M.D., Assistant in Orthopedic Surgery.
ANTHONY HIGGINS, M.D., Assistant in Orthopedic Surgery (from September 1, 1965).
ROBERT E. LEACH, M.D., Assistant in Orthopedic Surgery.
JAMES G. MANSON, M.B., CH.B., Assistant in Orthopedic Surgery.
JOHN B. MCGINTY, M.D., Assistant in Orthopedic Surgery (from January 1, 1966).

HARVARD MEDICAL SCHOOL

WILLIAM R. TORGERSON, JR., M.D., Assistant in Orthopedic Surgery.

MARVIN S. WEINFELD, M.D., Assistant in Orthopedic Surgery.

JOHN R. AUTY, PH.D., Research Fellow in Orthopedic Surgery
(from April 1, 1966).

JAMES I. HUDDLESTON, M.D., Research Fellow in Orthopedic Surgery.

TAEKO OGIHARA, B.S., Research Fellow in Orthopedic Surgery
(appointment expired July 31, 1965).

PANOS G. PANAGAKOS, M.D., Research Fellow in Orthopedic Surgery.

JEROME M. SEYER, PH.D., Research Fellow in Orthopedic Surgery
(from December 1, 1965).

HUGH G. WATTS, M.D., Research Fellow in Orthopedic Surgery
(from November 1, 1965).

MICHAEL A. ASHWORTH, M.D., Teaching Fellow in Orthopedic Surgery
(from October 1, 1965).

ROBERT A. FIRST, M.D., Teaching Fellow in Orthopedic Surgery
(appointment expired September 30, 1965).

KIRBY L. C. VON KESSLER, M.D., Teaching Fellow in Orthopedic Surgery
(from October 1, 1965).

JOHN E. LARKIN, M.D., Teaching Fellow in Orthopedic Surgery
(from April 1, 1966).

EUGENE J. MORRISSEY, M.D., Teaching Fellow in Orthopedic Surgery
(appointment expired September 30, 1965).

ERIC L. RADIN, M.D., Teaching Fellow in Orthopedic Surgery
(appointment expired March 31, 1966).

CHARLES L. RENSHAW, M.D., Teaching Fellow in Orthopedic Surgery
(from April 1, 1966).

JAMES G. RICH, M.D., Teaching Fellow in Orthopedic Surgery
(from October 1, 1965).

ROBERT C. RUNYON, M.D., Teaching Fellow in Orthopedic Surgery
(appointment expired December 31, 1965).

WILLIAM H. SULLIVAN, M.D., Teaching Fellow in Orthopedic Surgery
(from January 1, 1966).

ORTHOPEDIC SURGERY

RODERICK H. TURNER, M.D., Teaching Fellow in Orthopedic Surgery (from January 1, 1966).

Required Course

ORTHOPEDIC SURGERY. *Introduction to the Clinic and Principal Clinical Year.* — Instruction is given in orthopedic surgery during the Introduction to the Clinic by sectional assignments and by three lecture-symposial exercises to the whole class, and during the Principal Clinical Year by clerkships of three weeks duration.

INTRODUCTION TO THE CLINIC

HOURS

Lecture-symposia.

8

Clinical exercises. Drs. GREEN, GLIMCHER, BROWN, and ASSOCIATES. C.H.M.C., M.G.H., P.B.B.H., B.I.H., and B.C.H. In sections throughout the period.

PRINCIPAL CLINICAL YEAR

Ward clerkships. Drs. GREEN, GLIMCHER, BROWN, BANKS, TROTT, and ASSOCIATES. C.H.M.C., M.G.H., P.B.B.H. Two weeks of the clerkship is spent at either the Massachusetts General Hospital or the Peter Bent Brigham Hospital and the other week at The Children's Hospital Medical Center.

120

Fourth Year Elective Courses

BLOCK COURSES

- 501M. Children's Orthopedics. Drs. W. T. GREEN, TROTT, and ASSOCIATES.
- 502M. Adult Orthopedics. Drs. W. T. GREEN, BANKS, and ASSOCIATES.
- 503M. Children and Adults. Drs. W. T. GREEN, BANKS, and ASSOCIATES.
- 504M. Functional Anatomy, Biomechanics, and Reconstructive Surgery. Drs. KERMOND and PIERCE. (*Same course as Medicine 541M.*)
- 505M. Clinical Orthopedic Surgery, Fractures, and Trauma. Drs. GLIMCHER, T. BROWN, AUFRANC, and ASSOCIATES.

BLOCK COURSES — RESEARCH

- 801. Musculoskeletal System. Dr. BANKS.
- 802. Musculoskeletal System. Dr. COHEN.
- 803. Musculoskeletal System. Dr. W. T. GREEN.
- 804. Musculoskeletal System. Dr. PAPPAS.

HARVARD MEDICAL SCHOOL

- 805. Research Problems in the Structure and Function of Bone and Cartilage. Dr. GLIMCHER and ASSOCIATES.
- 806. Electrophysiology of Skeletal Muscle. Dr. PIERCE.

LONGITUDINAL COURSE

- 701. Trauma. Drs. MOORE, W. T. GREEN, BANKS, QUIGLEY, MATSON, HARRISON, VANDAM, and MORGAN. (*Same course as Surgery 706.*)

OTOLOGY AND LARYNGOLOGY

DEPARTMENT OF OTOLOGY AND LARYNGOLOGY

HAROLD F. SCHUKNECHT, M.D., A.M. (hon.), Walter Augustus Lecompte Professor of Otology, Professor of Laryngology, and Head of the Department.

WILLIAM W. MONTGOMERY, M.D., Assistant Professor of Otology at the Massachusetts Eye and Ear Infirmary.

JOHN R. RICHARDSON, M.D., Assistant Clinical Professor of Laryngology.

FRANCIS L. WEILLE, M.D., Assistant Clinical Professor of Otology.

JOHN W. IRWIN, M.D., Research Associate in Otolaryngology.

NELSON Y. KIANG, PH.D., Research Associate in Otolaryngology.

ROBERT S. KIMURA, A.B., Research Associate in Otolaryngology.

SWIATOPOLK P. MARFEY, PH.D., Research Associate in Biological Chemistry in the Department of Otology and Laryngology.

WALTER A. ROSENBLITH, ING.RAD., Research Associate in Otology.

HUGO D. ANGELINI, M.D., Instructor in Otolaryngology.

WERNER D. CHASIN, M.D., Instructor in Otolaryngology.

JOSHUA C. DROOKER, M.D., Instructor in Otolaryngology.

CHARLES F. FERGUSON, M.D., Instructor in Otolaryngology.

CARLYLE G. FLAKE, M.D., Instructor in Otolaryngology.

ALLAN C. GOODMAN, PH.D., Instructor in Otology.

CHARLES KENT, M.D., Instructor in Laryngology.

ROBERT E. KLOTZ, M.D., Instructor in Otology.

JOSEPH LENTINE, M.D., Instructor in Otolaryngology.

DONALD K. LEWIS, M.D., Instructor in Otolaryngology.

ARAM ROOPENIAN, M.D., Instructor in Otolaryngology.

YALE J. BERRY, M.D., Assistant in Otolaryngology.

ROBERT W. CLUBB, D.M.D., M.D., Assistant in Otolaryngology.

EUGENE H. COURTISS, M.D., Assistant in Otolaryngology.

ALLEN G. EDWARDS, JR., Assistant in Otolaryngology.

RICHARD R. GACEK, M.D., Assistant in Otolaryngology.

WILLIAM L. HAYDEN, M.D., Assistant in Otolaryngology.

GEZA J. JAKO, M.D., Assistant in Otolaryngology.

HARVARD MEDICAL SCHOOL

- ROY A. JOHNSON, M.D., Assistant in Otolaryngology.
DONALD G. KEAMY, M.D., Assistant in Otolaryngology.
JOHN M. KURKJIAN, M.D., Assistant in Otolaryngology (from September 1, 1965).
ROBERT H. LOFGREN, M.D., Assistant in Otolaryngology.
DAVID L. PIERCE, M.D., Assistant in Otolaryngology.
SEYMOUR H. REUTER, M.D., Assistant in Otolaryngology (resigned October 31, 1965).
SIDNEY SHORE, M.D., Assistant in Otolaryngology.
ALFRED D. WEISS, M.D., Assistant in Otolaryngology.
ANTHONY ZOVICKIAN, M.D., Assistant in Otolaryngology.
DAVID G. DAVIES, M.B., B.S., Research Fellow in Otolaryngology.
LUIZ F. P. DEMOURA, M.D., Research Fellow in Otolaryngology (appointment expires May 31, 1966).
TETSUO ISHII, M.D., Research Fellow in Otolaryngology (appointment expires May 31, 1966).
COLLINGWOOD S. KARMODY, M.B., CH.B., Research Fellow in Otolaryngology (resigned October 31, 1965).
AARNO T. KOHONEN, M.D., Research Fellow in Otolaryngology (from November 1, 1965).
YASHIHIKO MURAKAMI, M.D., Research Fellow in Otolaryngology.
JOEL M. BERNSTEIN, M.D., Teaching Fellow in Otolaryngology.
CHARLES W. GROSS, M.D., Teaching Fellow in Otolaryngology.
JOHN E. KNOWLES, M.D., Teaching Fellow in Otolaryngology.
HERBERT SILVERSTEIN, M.D., M.Sc., Teaching Fellow in Otolaryngology.
PETER VAN ORMAN, M.D., Teaching Fellow in Otolaryngology.

Affiliated:

- JOHN S. IRWIN, M.D., Research Associate in Microcirculation, M.I.T.

Required Course

OTOLOGY and LARYNGOLOGY. *Introduction to the Clinic and Principal Clinical Year.*—Lectures and clinical instruction at the School and the hospitals.

OTOLOGY AND LARYNGOLOGY

INTRODUCTION TO THE CLINIC

HOURS

Lectures and Clinical Instruction. Dr. SCHUKNECHT and Associates.

9

PRINCIPAL CLINICAL YEAR

Clinical Instruction (groups of four or five), Seminars (groups of nine) given at the M.E.E.I. Seminars: Monday, Tuesday, and Wednesday 8:00-9:00 a.m. Clinical Exercises: 9:00 a.m.-12:30 p.m. alternate mornings and one afternoon 1:00-3:00 p.m. Each student has ten sessions of clinical instruction. Dr. SCHUKNECHT and Associates.

36

Fourth Year Elective Course

BLOCK COURSE

501M. Clinical Otolaryngology. Dr. SCHUKNECHT and Associates.

HARVARD MEDICAL SCHOOL

DEPARTMENT OF PATHOLOGY

ARTHUR T. HERTIG, M.D., Shattuck Professor of Pathological Anatomy, and Head of the Department.

BENJAMIN CASTLEMAN, M.D., Professor of Pathology at the Massachusetts General Hospital.

JOHN M. CRAIG, M.D., Clinical Professor of Pathology.

GUSTAVE J. DAMMIN, M.D., Elsie T. Friedman Professor of Pathology.

SIDNEY FARBER, M.D., Professor of Pathology at The Children's Hospital.

DAVID G. FREIMAN, M.D., Professor of Pathology at the Beth Israel Hospital.

OLIVE GATES, M.D., Clinical Professor of Pathology.

WILLIAM A. MEISSNER, M.D., Clinical Professor of Pathology.

THOMAS C. JONES, D.V.M., Associate Clinical Professor of Pathology.

MORRIS J. KARNOVSKY, M.B., CH.B., Associate Professor of Pathology.

PHILIP M. Lecompte, M.D., Associate Clinical Professor of Pathology.

GUIDO MAJNO, M.D., A.M. (hon.), Associate Professor of Pathology.

ROBERT E. SCULLY, M.D., Associate Clinical Professor of Pathology.

EDGAR B. TAFT, M.D., Associate Clinical Professor of Pathology and Tutor in Pathology.

GORDON F. VAWTER, M.D., Associate Clinical Professor of Pathology (on leave July 1, 1965 through June 30, 1966).

AUSTIN L. VICKERY, JR., Associate Clinical Professor of Pathology.

LEONARD ATKINS, M.D., Assistant Clinical Professor of Pathology

JAMES B. CAULFIELD, M.D., Assistant Professor of Pathology at the Massachusetts General Hospital.

PATHOLOGY

- WALLACE H. CLARK, JR., M.D., Assistant Professor of Pathology at the Massachusetts General Hospital.
- RICHARD B. COHEN, M.D., Assistant Professor of Pathology at the Massachusetts General Hospital.
- BRADLEY E. COPELAND, M.D., Assistant Clinical Professor of Pathology.
- RAMZI S. COTRAN, M.D., Assistant Professor of Pathology.
- GEORGE W. CURTIS, M.D., Assistant Clinical Professor of Pathology.
- JAMES T. DUHIG, M.B., CH.B., Assistant Clinical Professor of Pathology (resigned April 30, 1966).
- THOMAS J. GILL, 3RD, M.D., Assistant Professor of Pathology.
- HAZEL M. GORE, M.B., CH.B., Assistant Professor of Pathology.
- EARL "E" HELLERSTEIN, M.D., Assistant Professor of Pathology.
- JOHANNES P. KULKA, M.D., Assistant Clinical Professor of Pathology.
- FRANZ VON LICHTENBERG, M.D., Assistant Professor of Pathology at the Peter Bent Brigham Hospital.
- RICHARD A. MACDONALD, M.D., Assistant Professor of Pathology (resigned December 31, 1965).
- SI-CHUN MING, M.D., Assistant Professor of Pathology at the Beth Israel Hospital.
- AGNES B. RUSSFIELD, PH.D., M.D., Assistant Professor of Pathology at The Children's Hospital.
- REUBEN Z. SCHULZ, M.D., Assistant Clinical Professor of Pathology.
- RONALD C. SNIFFEN, M.D., Assistant Clinical Professor of Pathology.
- ROBERT FIENBERG, M.D., Lecturer on Pathology.
- HERMANN LISCO, M.D., Lecturer on Pathology.
- BERNARD F. TRUM, D.V.M., Lecturer on Veterinary Medicine in the Department of Pathology, Director of the Animal Research Center and Director of the New England Regional Primate Research Center.
- KAROLY BALOGH, M.D., Associate in Pathology at the Massachusetts General Hospital.

HARVARD MEDICAL SCHOOL

- JOSEPH M. CORSON, M.D., Associate in Pathology at the Peter Bent Brigham Hospital.
- JOHN E. CRAIGHEAD, M.D., Associate in Pathology.
- DIANE W. CROCKER, M.D., Associate in Pathology at the Peter Bent Brigham Hospital.
- SHIRLEY G. DRISCOLL, M.D., Associate in Pathology at the Boston Lying-in Hospital.
- ROBERT L. EHRLMANN, M.D., Clinical Associate in Pathology.
- MARTIN H. FLAX, PH.D., M.D., Associate in Pathology at the Massachusetts General Hospital.
- WALLACE A. JONES, M.D., Associate in Pathology at the Massachusetts General Hospital.
- EDWARD S. REYNOLDS, JR., M.D., Associate in Pathology at the Peter Bent Brigham Hospital.
- SANFORD I. ROTH, M.D., Associate in Pathology at the Massachusetts General Hospital.
- STEPHEN M. SHEA, M.B., CH.B., Associate in Pathology.
- PRISCILLA D. TAFT, M.D., Clinical Associate in Pathology.
- GEORGE E. FOLEY, D.Sc., Lecturer on Pathology.
- IRA GORE, M.D., Lecturer on Pathology.
- LEONARD S. GOTTLIEB, M.D., Lecturer on Pathology.
- JAMES H. GRAHAM, M.D., Lecturer on Pathology.
- OSCAR A. ISERI, M.D., Lecturer on Pathology (from September 1, 1965).
- WALTER G. J. PUTSCHAR, M.D., Lecturer on Pathology.
- NILS RINGERTZ, M.D., Visiting Lecturer on Pathology (March 21 through March 26, 1966).
- STANLEY L. ROBBINS, M.D., Lecturer on Pathology.
- ELEANOR C. ADAMS, A.B., Research Associate in Pathology.
- RICHARD A. ADAMS, PH.D., Research Associate in Pathology.
- ROGELIO ALARCON, M.D., Research Associate in Pathology.
- THOMAS P. ASHFORD, M.D., Research Associate in Surgery in the Department of Pathology.
- MAYO E. BROWN, M.S., Research Associate in Pathology.
- JOHN A. CAVINS, M.D., Research Associate in Pathology.

PATHOLOGY

GEORGE T. DIAMANDOPOULOS, M.D., Research Associate in Pathology.

SAMUEL S. EPSTEIN, M.D., Research Associate in Pathology.

LIPPMAN H. GERONIMUS, PH.D., Research Associate in Pathology.

MORRIS N. GREEN, PH.D., Research Associate in Pathology.

ALFRED H. HANDLER, PH.D., Research Associate in Pathology
(resigned July 31, 1965).

MASANDO HAYASHI, M.D., PH.D., Research Associate in Pathology.

RAUL H. HOUSSAY, M.D., Research Associate in Pathology.

RONALD D. HUNT, D.V.M., Research Associate in Pathology.

DAVID L. JOFTES, PH.D., Research Associate in Pathology.

LORNA D. JOHNSON, M.D., Research Associate in Pathology.

SAUL MALKIEL, PH.D., Research Associate in Pathology.

ROBERT E. MCCARTHY, PH.D., Research Associate in Pathology.

EDWARD J. MODEST, PH.D., Research Associate in Pathology.

HANS B. NEVINNY-STICKEL, M.D., Research Associate in Pathology.

DEWAYNE ROBERTS, PH.D., Research Associate in Pathology.

HOWARD S. RUBENSTEIN, M.D., Research Associate in Pathology.

ELLIOTT W. STRAUSS, M.D., Research Associate in Pathology
(resigned August 31, 1965).

TIEN-WEN TAO, PH.D., Research Associate in Pathology.

BETTY B. G. UZMAN, M.D., Research Associate in Pathology.

GEORGE YERGANIAN, PH.D., Research Associate in Pathology.

ELIAS AMADOR, M.D., Instructor in Pathology.

ROGER A. COTE, M.D., Instructor in Pathology (from September 1, 1965).

CHARLES J. DE WAN, M.D., Instructor in Pathology.

JULES EDLOW, M.D., Instructor in Pathology.

EDWARD O. FOX, M.D., Instructor in Pathology.

GILBERT H. FRIEDEL, M.D., Instructor in Pathology.

CHARLES E. GILMORE, D.V.M., Instructor in Pathology.

HARVEY GOLDMAN, M.D., Instructor in Pathology.

JOHN D. HOUGHTON, M.D., Instructor in Pathology.

JOSEPH S. INCZE, M.D., Instructor in Pathology.

HUBERT JOCKIN, M.D., Instructor in Pathology.

HARVARD MEDICAL SCHOOL

- CHARLES S. KAHN, M.D., Instructor in Pathology.
TILDE S. KLINE, M.D., Instructor in Pathology.
OLGA C. LEARY, M.D., Instructor in Pathology.
MERLE A. LEGG, M.D., C.M., Instructor in Pathology.
ARTHUR A. LIKE, M.D., Instructor in Pathology.
PEN-MING L. MING, M.D., Instructor in Pathology (from October 1, 1965).
JOSEPH C. MERRIAM, JR., M.D., Instructor in Pathology.
MIRIAM MOLDVEN (GERONIMUS), M.D., Instructor in Pathology.
ARTHUR E. O'DEA, M.D., Instructor in Pathology.
GISELLE S. PECHET, M.D., Instructor in Pathology.
JOHN A. PETERS, M.D., Instructor in Pathology.
CHARLES R. ROBINSON, M.B., CH.B., Instructor in Pathology.
JOE SUYEMOTO, M.D., Instructor in Pathology.
HAROLD J. WHITE, M.D., Instructor in Pathology.
HUBERT J. WOLFE, M.D., Instructor in Pathology.
RICARDO ALVARADO, M.D., Assistant in Pathology (resigned December 31, 1965).
ALBERT E. ANDERSON, M.D., Assistant in Pathology.
GEORGE K. BAER, M.D., Assistant in Pathology.
JOHN B. BLENNERHASSETT, M.B., CH.B., Assistant in Pathology.
HARRY W. CARTER, M.D., Assistant in Pathology.
SHELDON COOPERMAN, M.D., Assistant in Pathology.
GEORGE R. DICKERSIN, M.D., Assistant in Pathology.
GEORGE W. EVANS, M.D., Assistant in Pathology (from September 1, 1965).
JOSEPH E. FREYDINGER, M.D., Assistant in Pathology (resigned December 31, 1965).
JACOB GOLDSTEIN, PH.D., Assistant in Pathology.
ROBERT S. HARPER, M.D., Assistant in Pathology.
CARL A. HARRIS, PH.D., M.D., Assistant in Pathology.
MAURICE M. HELPERN, M.D., Assistant in Pathology.
DAVID KESSEL, PH.D., Assistant in Pathology.
GYORGY KURY, M.D., Assistant in Pathology.
GEORGE F. KWASS, M.D., Assistant in Pathology.
RICHARD R. LINDQUIST, M.D., Assistant in Pathology.

PATHOLOGY

- HARRY L. McCOMBS, M.D., Assistant in Pathology (resigned September 14, 1965).
- KILMER S. McCULLY, M.D., Assistant in Pathology.
- MONIRA K. RIFAAT, M.B., CH.B., Assistant in Pathology (from September 1, 1965).
- ANDRIANNE E. ROGERS, M.D., Assistant in Pathology (resigned November 15, 1965).
- DIETRICH SCHACHTSCHABEL, M.D., Assistant in Pathology (resigned November 19, 1965).
- LUKE G. TEDESCHI, M.D., Assistant in Pathology.
- JOSEPH CHIANG, M.D., Research Fellow in Pathology.
- HIROSHI ENDO, M.D., Research Fellow in Pathology (resigned December 31, 1965).
- RICHARD C. GRAHAM, JR., M.D., Research Fellow in Pathology.
- NORVAL W. KING, JR., D.V.M., Research Fellow in Pathology.
- KAETHE KRETSCHMER, M.D., Research Fellow in Pathology (from March 1, 1966).
- IRWIN LEAV, D.V.M., Research Fellow in Pathology.
- ROBERT M. LEWIS, D.V.M., Research Fellow in Pathology.
- DAVID S. PAPERMASTER, M.D., Research Fellow in Pathology.
- LEAMON T. PULLEY, D.V.M., Research Fellow in Pathology (from October 1, 1965).
- JOHN P. REMENSNYDER, M.D., Research Fellow in Pathology.
- BARBARA H. SANFORD, PH.D., Research Fellow in Pathology.
- SIMON J. SIMONIAN, M.B., B.S., Research Fellow in Pathology (from September 1, 1965).
- JEROME H. SMITH, M.D., Research Fellow in Pathology.
- TATSURO TAKINO, M.D., PH.D., Research Fellow in Pathology (resigned November 15, 1965).
- BERNARD C. ZOOK, D.V.M., Research Fellow in Pathology.
- ANDREW S. ABRAHAM, M.D., Teaching Fellow in Pathology.
- CAROL J. AMICK, M.D., Teaching Fellow in Pathology.
- SHELDON S. BADDOCK, M.D., Teaching Fellow in Pathology.
- GEORGE J. BUSCH, M.D., Teaching Fellow in Pathology.
- IRWIN M. CHERNEW, M.D., Teaching Fellow in Pathology.
- FRANCISCO CIVANTOS, M.D., Teaching Fellow in Pathology.

HARVARD MEDICAL SCHOOL

CARMEL L. DAVY, M.B., CH.B., Teaching Fellow in Pathology.
ARTHUR W. DUFF, M.D., Teaching Fellow in Pathology.
HILARY EVANS, M.D., Teaching Fellow in Pathology.
ELEONORA G. GALVANEK, M.D., Teaching Fellow in Pathology.
NORMAN G. P. HELGESON, M.D., Teaching Fellow in Pathology.
WILLIAM J. HESTER, M.D., Teaching Fellow in Pathology.
CHARLES G. HUIZENGA, M.D., Teaching Fellow in Pathology.
RICHARD A. JAQUA, M.D., Teaching Fellow in Pathology.
EARL J. KASDON, M.D., Teaching Fellow in Pathology.
ISAO KATAYAMA, M.D., Teaching Fellow in Pathology.
ALBERT R. KELLER, M.D., Teaching Fellow in Pathology.
EMIL M. LAGA, M.D., Teaching Fellow in Pathology.
HOUCHIDAR C. MANECHE, M.D., Teaching Fellow in Pathology.
TAKASHI OKAGAKI, M.D., Teaching Fellow in Pathology.
WILLIAM F. O'TOOLE, M.D., Teaching Fellow in Pathology.
JOHN H. RIPPEY, M.D., Teaching Fellow in Pathology.
DANIEL G. SHEAHAN, M.B., CH.B., Teaching Fellow in Pathology.
JOHN L. SWANSON, M.D., Teaching Fellow in Pathology.
BENJAMIN L. TOY, D.M.D., M.D., Teaching Fellow in Pathology.
JOEL UMLAS, M.D., Teaching Fellow in Pathology.
RONALD S. WEINSTEIN, M.D., Teaching Fellow in Pathology.
DINAH T. YU, M.B., Teaching Fellow in Pathology.

Affiliated:

JOHN C. SNYDER, M.D., Professor of Public Health Bacteriology,
and Dean of the School of Public Health.
PAUL GOLDBABER, D.D.S., Associate Professor of Periodontology,
and Tutor in Dental Science.
EDWARD H. KASS, M.D., PH.D., Associate Professor of Bacte-
riology and Immunology.
TAYLOR R. SMITH, M.D., Clinical Associate in Ophthalmology
CAROLYN COHEN, PH.D., Lecturer on Biophysics at The Children's
Hospital.
LEWIS T. MANN, JR., Lecturer on Biological Chemistry.
SHOU-CHENG J. FU, PH.D., Research Associate in Biological Chem-
istry.

PATHOLOGY

MERVYN ISRAEL, PH.D., Research Associate in Biological Chemistry.

Required Course

PATHOLOGY A. *Second Year.* — The second year course in pathology is planned as a systematic survey of pathology. It consists of lectures, laboratory study of pathologic histology and demonstrations of gross pathologic material, partly fixed specimens, but more extensively demonstrations of fresh autopsy and surgical material brought from the laboratories of the affiliated hospitals. Students visit the Pathology Laboratories of the Boston City Hospital, Massachusetts General Hospital, Peter Bent Brigham Hospital, Children's Hospital, Beth Israel Hospital, Free Hospital for Women, New England Deaconess Hospital, Boston Lying-in Hospital, and the South Huntington Avenue Veterans Hospital, for participation in performance of autopsies.

Lectures are given three days in the week by the staff. The course is divided roughly, though not sharply, into general and special pathology, covering in the first part of the year basic pathologic processes, such as tissue injury and repair, inflammation, tissue responses to specific infectious agents and neoplasia. Owing to the revision of the second year curriculum, special pathology is now integrated with the other second year courses and designated as Pathologic Physiology. Seven organs or systems will be thus considered during the present academic year: hematopoietic system, kidney, cardiovascular system, respiratory system, gastrointestinal system, endocrine-reproductive system, musculo-skeletal, and nervous system. The pathology of the eye and oral cavity are covered in collaboration with other departments of the University.

Courses in parasitology and neuropathology are given separately by the Department of Tropical Public Health of the Harvard School of Public Health and the Departments of Neurology and Psychiatry, respectively. Neuropathology is, however, one of the component parts of the multi-departmental course, Pathophysiology.

SECOND YEAR

HOURS

Lectures. Dr. HERTIG and ASSOCIATES.

Laboratory work. Dr. HERTIG and ASSOCIATES.

350*

* This figure includes Parasitology and Neuropathology.

HARVARD MEDICAL SCHOOL

Fourth Year Elective Courses

BLOCK COURSES

- 501. Advanced Pathology. Dr. DAMMIN.
- 502. Gynecologic Pathology. Dr. J. M. CRAIG.
- 503. Fetal and Obstetrical Pathology. Dr. J. M. CRAIG.
- 504. Advanced Pathology. Drs. S. L. ROBBINS and R. S. COTRAN.
- 505. Advanced Pathology. Drs. CASTLEMAN and E. B. TAFT.
- 506. Advanced Pathology. Drs. CASTLEMAN and E. B. TAFT.
- 507. Advanced Pathology. Dr. FREIMAN.
- 508. Advanced Pathology. Dr. FARBER.
- 509. Pathology of Tumors. Dr. MEISSNER.
- 510. Pathology of Endocrine Diseases. Dr. MEISSNER.
- 511M. Pathology of Skin—Clinical and Microscopic Correlations. Drs. FITZPATRICK and W. CLARK. (*Same course as Dermatology 503M.*)
- 512M. Clinical Liver Disease. Dr. DAVIDSON and ASSOCIATES. (*Same course as Medicine 514M.*)
- 513M. Advanced Study in Neuropathology. Dr. ROMANUL. (*Same course as Neurology 502M.*)
- 514M. Advanced Study in Neuropathology. Dr. E. P. RICHARDSON. (*Same course as Neurology 509M.*)
- 515M. Gastrointestinal Diseases. Drs. ZAMCHECK, DAVIDSON, GOTTLIEB, and ASSOCIATES. (*Same course as Medicine 546M.*)

BLOCK COURSES — RESEARCH

- 801. Research in Pathology (a): Laboratory Aspects. Dr. DAMMIN.
- 802. Research in Pathology (b): Clinico-Pathologic Aspects. Dr. DAMMIN.
- 803. Experimental Research Oriented to Problems of Neoplasia. Dr. LISCO.
- 804. Research in Special Areas. Dr. FARBER and ASSOCIATES.
- 805. Research in Pathology. Drs. CASTLEMAN and E. B. TAFT.
- 806. Gastrointestinal Disease II. Drs. ZAMCHECK, DAVIDSON, and ASSOCIATES. (*Same course as Medicine 839.*)

LONGITUDINAL COURSE

- 701. Neoplasms of Melanocytes and Related Problems in Cutaneous Pathology. Dr. W. CLARK. (*Same course as Dermatology 704.*)

DIVISION OF FORENSIC PATHOLOGY — DEPARTMENT OF LEGAL MEDICINE

SHIELDS WARREN, M.D., D.Sc. (hon.), LL.D., Professor of Pathology at the New England Deaconess Hospital, *emeritus*, and Special Consultant to the Dean of the Faculty of Medicine.

PATHOLOGY

LEONARD ATKINS, M.D., Assistant Clinical Professor of Pathology and Acting Head of the Division of Forensic Pathology — Department of Legal Medicine (from February 1, 1966).
GEORGE W. CURTIS, M.D., Clinical Associate in Pathology.
GEORGE G. KATSAS, M.D., Associate in Legal Medicine and Acting Head of the Division of Forensic Pathology — Department of Legal Medicine (resigned January 31, 1966).
CONSTANTINE J. MALETSKOS, PH.D., Lecturer on Legal Medicine.
ARTHUR J. MCBAY, PH.D., Lecturer on Legal Medicine.
NOLTON H. BIGELOW, M.D., Instructor in Legal Medicine.
EZATOLLAH FOROUGH, M.D., Research Fellow in Legal Medicine.

Affiliated:

JACK R. EWALT, M.D., A.M. (hon.), Bullard Professor of Psychiatry.

Required Course

Principal Clinical Year. — Fourteen lectures. The relationship of the physician to organized society. Laws and legal principles relating to the practice of medicine. Medical evidence and its relation to the administration of justice. Principles of forensic pathology and toxicology. Lectures.

PRINCIPAL CLINICAL YEAR	HOURS
Lectures. Dr. KATSAS and ASSOCIATES. H.M.S. Fourteen Wednesday afternoons, at 4.15 P.M.	14

Fourth Year Elective Course

BLOCK COURSE

550. Forensic Pathology including Field Investigation. Dr. KATSAS and ASSOCIATES.

HARVARD MEDICAL SCHOOL

DEPARTMENT OF PEDIATRICS

CHARLES A. JANEWAY, M.D., A.M. (hon.), Thomas Morgan Rotch Professor of Pediatrics, and Head of the Department at The Children's Hospital (on leave September 1, 1965 through February 28, 1966).

NATHAN B. TALBOT, M.D., Charles Wilder Professor of Pediatrics, and Head of the Department at the Massachusetts General Hospital.

LOUIS K. DIAMOND, M.D., Professor of Pediatrics at The Children's Hospital (Acting Head of The Department at The Children's Hospital, September 1, 1965 through February 28, 1966).

JAMES R. GALLAGHER, M.D., Clinical Professor of Pediatrics.

ALEXANDER S. NADAS, M.D., Clinical Professor of Pediatrics.

CLEMENT A. SMITH, M.D., A.M. (hon.), Professor of Pediatrics at the Boston Lying-in Hospital, and Chairman of the Executive Committee of the Departments of Pediatrics.

WILLIAM BERENBERG, M.D., Associate Clinical Professor of Pediatrics.

STEWART H. CLIFFORD, M.D., Associate Clinical Professor of Pediatrics.

THOMAS E. CONE, JR., M.D., Associate Clinical Professor of Pediatrics.

JOHN D. CRAWFORD, M.D., Associate Professor of Pediatrics at the Massachusetts General Hospital.

PARK S. GERALD, M.D., Associate Clinical Professor of Pediatrics.

HARRY SHWACHMAN, M.D., Associate Clinical Professor of Pediatrics.

ROBERT B. BERG, M.D., Assistant Professor of Pediatrics at the Beth Israel Hospital.

JOHN F. CRIGLER, JR., M.D., Assistant Professor of Pediatrics at The Children's Hospital.

FRANCIS X. FELLERS, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

PEDIATRICS

- SAMUEL L. KATZ, M.D., Assistant Professor of Pediatrics at The Children's Hospital.
- RALPH A. ROSS, M.D., Assistant Clinical Professor of Pediatrics.
- BENEDICT F. MASSELL, M.D., Lecturer on Pediatrics.
- DEWITT C. BALDWIN, JR., M.D., Associate in Pediatrics at the Forsyth Dental Infirmary for Children.
- LEO B. BURGIN, M.D., Clinical Associate in Pediatrics.
- JOHN P. CONNELLY, M.D., Associate in Pediatrics.
- JAMES E. DRORBAUGH, M.D., Clinical Associate in Pediatrics.
- NORMAN I. GOLD, PH.D., Associate in Biological Chemistry in the Department of Pediatrics at The Children's Hospital.
- PAUL G. HUGENHOLTZ, M.D., Clinical Associate in Pediatrics.
- RICHARD B. KEARSLEY, M.D., Associate in Pediatrics.
- SHERWIN V. KEVY, M.D., Clinical Associate in Pediatrics.
- JEROME O. KLEIN, M.D., Associate in Pediatrics and Francis Weld Peabody Fellow in Medicine.
- ROBERT P. MASLAND, JR., M.D., Clinical Associate in Pediatrics.
- ROBERT G. MONROE, M.D., Associate in Pediatrics at The Children's Hospital.
- HARRY L. MUELLER, M.D., Clinical Associate in Pediatrics.
- NICHOLAS M. NELSON, M.D., Associate in Pediatrics at the Boston Lying-in Hospital.
- PHILIP J. PORTER, M.D., Clinical Associate in Pediatrics.
- FRED S. ROSEN, M.D., Associate in Pediatrics at The Children's Hospital and Tutor in Medical Science.
- WILLIAM D. WINTER, JR., M.D., Clinical Associate in Pediatrics.
- SYDNEY S. GELLIS, M.D., Lecturer on Pediatrics.
- ROBERT KLEIN, M.D., Lecturer on Pediatrics.
- JOHN KOSA, PH.D., Lecturer on Sociology in the Department of Pediatrics.
- MARTIN F. SEIP, M.D., Visiting Lecturer on Pediatrics (appointment expired January 31, 1966).
- LOUIS WEINSTEIN, PH.D., M.D., Lecturer on Infectious Diseases.
- IRENA ANTONOWICZ, M.S., Research Associate in Pediatrics.
- ALLEN C. CROCKER, M.D., Research Associate in Pediatrics and Tutor in Medical Science.

HARVARD MEDICAL SCHOOL

- MITSUKO T. LAFORET, M.D., Research Associate in Pediatrics
(from August 1, 1965).
- MIRIAM D. MANNING, M.D., Research Associate in Pediatrics.
- MARSHALL MELIN, PH.D., Research Associate in Pediatrics.
- JACOB G. MICHAEL, PH.D., Research Associate in Bacteriology
and Immunology in the Department of Pediatrics.
- HARALD ORJASAETER, M.D., Research Associate in Pediatrics
(from February 1, 1966).
- KLAUS P. RIEGEL, M.D., Research Associate in Pediatrics (appointment expired July 31, 1965).
- MARVIN SNIDER, PH.D., Research Associate in Psychology in the
Department of Pediatrics (appointment expired December
31, 1965).
- DOROTHY B. VILLEE, M.D., Research Associate in Pediatrics.
- THOMAS W. ADAMS, M.D., Instructor in Pediatrics.
- OLGA E. ALLERS, M.D., Instructor in Pediatrics.
- JOEL J. ALPERT, M.D., Instructor in Pediatrics.
- EUAN T. BLANCH, M.D., Instructor in Pediatrics.
- THOMAS B. BRAZELTON, M.D., Instructor in Pediatrics.
- NANCY H. BRIGHT, M.D., Instructor in Pediatrics.
- JOHN K. BRINES, M.D., Instructor in Pediatrics.
- JAMES J. A. CAVANAUGH, M.D., Instructor in Pediatrics.
- WILLIAM D. COCHRAN, M.D., Instructor in Pediatrics.
- ALBERT COHEN, M.D., Instructor in Pediatrics.
- KAREL J. DE HAAS, M.D., Instructor in Pediatrics.
- WILLIAM A. DICKSON, M.D., Instructor in Pediatrics.
- WILLIAM R. DORSEY, M.D., C.M., Instructor in Pediatrics.
- EDWARD C. DYER, M.D., Instructor in Pediatrics.
- LEROY L. ELDREDGE, JR., M.D., Instructor in Pediatrics.
- LAWRENCE J. ESSEMBER, M.D., Instructor in Pediatrics.
- NATHAN H. FEARER, M.D., Instructor in Pediatrics.
- JOSEPH N. FISHER, JR., M.D., Instructor in Pediatrics.
- JOSEPH W. FOWLER, M.D., Instructor in Pediatrics.
- ALBERT A. FRANK, M.D., Instructor in Pediatrics.
- WALTER J. GAMBLE, M.D., Instructor in Pediatrics.
- ROBERT N. GANZ, M.D., Instructor in Pediatrics.

PEDIATRICS

WARREN M. GOLD, M.D., Instructor in Pediatrics.
ALLEN GOLDBLATT, M.D., Instructor in Pediatrics.
HERBERT A. HAESSLER, M.D., Instructor in Pediatrics.
SPRAGUE W. HAZARD, M.D., Instructor in Pediatrics.
JOHN P. HUBBELL, JR., M.D., Instructor in Pediatrics.
DAVID INGALL, M.D., Instructor in Pediatrics.
JOHN B. JOSEPH, M.P.H., M.D., Instructor in Pediatrics.
JOSEPH L. KENNEDY, JR., M.D., Instructor in Pediatrics.
KON T. KHAW, M.D., M.P.H., Instructor in Pediatrics.
MARTIN R. KLEMPERER, M.D., Instructor in Pediatrics.
CHRISTOPHER G. C. LAFARGE, M.D., Instructor in Pediatrics.
DAVID J. LANG, M.D., Instructor in Pediatrics.
JAY M. LEVY, M.D., Instructor in Pediatrics.
ALEXANDER S. MACDONALD, JR., M.D., Instructor in Pediatrics.
FRANCIS C. McDONALD, M.D., Instructor in Pediatrics.
JOSEPH J. MCGOVERN, M.D., Instructor in Pediatrics.
ANNA T. MITUS, M.D., Instructor in Pediatrics.
OTTO S. NAU, JR., M.D., Instructor in Pediatrics.
WILLIAM I. NEIKIRK, M.D., Instructor in Pediatrics.
CHARLOTTE G. NEUMANN, M.D., Instructor in Pediatrics.
JULIAN L. PEARLMAN, M.D., Instructor in Pediatrics.
THOMAS C. PEEBLES, M.D., Instructor in Pediatrics.
WILLIAM PFEFFER, JR., M.D., Instructor in Pediatrics.
DANIEL R. RECTANUS, M.D., Instructor in Pediatrics.
GERTRUD C. REYERSBACH, M.D., Instructor in Pediatrics.
ROBERT H. RICHIE, JR., M.D., Instructor in Pediatrics.
JOHN S. ROBEY, M.D., Instructor in Pediatrics.
JORDAN S. RUBOY, M.D., Instructor in Pediatrics.
ROBERT T. SCEERY, M.D., Instructor in Pediatrics.
EDWARD M. SEARS, M.D., Instructor in Pediatrics.
GERALD B. SHATTUCK, M.D., Instructor in Pediatrics.
S. NORMAN SHERRY, M.D., Instructor in Pediatrics.
IRVING SILVERMAN, M.D., Instructor in Pediatrics.
LONDON SNEDEKER, M.D., M.P.H., Instructor in Pediatrics.
LESTER F. SOYKA, M.D., Instructor in Pediatrics.
ALLAN B. STIMSON, M.D., Instructor in Pediatrics.

HARVARD MEDICAL SCHOOL

- HERBERT S. STRAUSS, M.D., Instructor in Pediatrics.
HARRY B. STULTS, JR., M.D., Instructor in Pediatrics.
GEORGE H. TAFT, M.D., Instructor in Pediatrics.
RUDOLF TOCH, M.D., Instructor in Pediatrics.
WILLIAM J. TURTLE, M.D., Instructor in Pediatrics.
JOHN W. G. TUTHILL, M.D., Instructor in Pediatrics.
IRVING UMANSKY, M.D., Instructor in Pediatrics.
WILHELMINA VAN DYKE, M.D., Instructor in Pediatrics.
STEELA Z. VANPRAAGH, M.D., Instructor in Pediatrics (from October 1, 1965).
JACOB WALLACE, M.D., Instructor in Pediatrics.
RICHARD H. WATSON, M.D., Instructor in Pediatrics.
MARY E. B. WOHL, M.D., Instructor in Pediatrics.
ELEONORE C. ZAUDY, M.D., Instructor in Pediatrics.
ALLA G. ZAVER, M.B., B.S., Instructor in Pediatrics.
WILLIAM J. ADELSON, M.D., Assistant in Pediatrics.
FRANCISCO AMEZCUA, M.D., Assistant in Pediatrics.
JACQUELINE T. AMEZCUA, M.D., Assistant in Pediatrics.
IRVING W. BAILIT, M.D., Assistant in Pediatrics.
LAKSHMI DAS, M.B., B.S., Assistant in Pediatrics.
KELLEY K. DAVIS, M.D., Assistant in Pediatrics.
RALPH EARLE, JR., M.D., Assistant in Pediatrics.
ARNOLD D. FIASCONE, M.D., Assistant in Pediatrics.
MORTON J. FRANKLIN, M.D., Assistant in Pediatrics.
CLEMENTINE F. GEISER, M.D., Assistant in Pediatrics.
ELIZABETH A. GREGORY, M.D., Assistant in Pediatrics.
ANDREW D. GUTHRIE, JR., M.D., Assistant in Pediatrics.
GERALD W. HAZARD, M.D., Assistant in Pediatrics (from November 1, 1965).
RICHARD A. KATZ, M.D., Assistant in Pediatrics.
MAURICE E. KEENAN, M.D., Assistant in Pediatrics.
HOWARD S. KING, M.D., Assistant in Pediatrics.
LEON E. KRUGER, M.D., Assistant in Pediatrics.
ROSEMARY C. LEAKE, M.D., Assistant in Pediatrics (from November 11, 1965).
MYRON MORRIS, PH.D., M.D., Assistant in Pediatrics.

PEDIATRICS

- LAWRENCE S. MORSE, M.D., Assistant in Pediatrics.
DONALD M. MUIRHEAD, JR., M.D., Assistant in Pediatrics.
ALICE C. NAUEN, M.D., Assistant in Pediatrics.
ROBERT J. ORME, M.D., Assistant in Pediatrics.
JOSEPH OSBORNE, M.D., Assistant in Pediatrics.
EILEEN M. OUELLETTE, M.D., Assistant in Pediatrics.
HOWARD J. POTTER, M.D., Assistant in Pediatrics.
STEPHAN L. REYNOLDS, M.D., Assistant in Pediatrics.
OLIVER F. RODDEY, M.D., Assistant in Pediatrics.
MURRAY K. ROSENTHAL, M.D., Assistant in Pediatrics.
GEORGE L. SIEGEL, A.B., Assistant in Pediatrics.
LESLIE SILVERSTONE, M.D., D.P.H., Assistant in Pediatrics.
GEORGE STORM, M.D., Assistant in Pediatrics (from October 1, 1965).
JOHN TAUB, M.D., Assistant in Pediatrics.
HAROLD J. WHEELER, M.D., Assistant in Pediatrics.
MARTIN K. WHITE, M.D., Assistant in Pediatrics.
THOMAS J. WHITFIELD, 3RD., M.D., Assistant in Pediatrics.
ALAN ZISKIND, M.D., Assistant in Pediatrics.
ISRAEL F. ABROMS, M.B., Ch.B., Research Fellow in Pediatrics
ALBERT AHARON, M.D. (Equiv.), Milton Research Fellow in Pediatrics.
WILLIAM H. ALBERS, M.D., Research Fellow in Pediatrics.
THEODORE W. AVRUSKIN, M.D., Research Fellow in Pediatrics.
ROBERT L. BAEHNER, M.D., Research Fellow in Pediatrics (from August 1, 1965).
RICHARD S. BAUM, M.D., Research Fellow in Pediatrics.
ABRAHAM BENDERLY, M.D., Research Fellow in Pediatrics.
GERALD E. BLOOM, M.D., Research Fellow in Pediatrics.
JOSIAH W. BROWN, M.D., Research Fellow in Pediatrics (from October 1, 1965).
GEORGE W. DANA, M.D., Research Fellow in Pediatrics (appointment expired August 31, 1965).
ROBERT C. ELLISON, M.D., Research Fellow in Pediatrics (from October 1, 1965).
GIUSEPPE ERBA, M.D., Research Fellow in Pediatrics.

HARVARD MEDICAL SCHOOL

- RICHARD FEINBLOOM, M.D., Research Fellow in Pediatrics.
- LOURDES C. FELARCA, M.D., Research Fellow in Pediatrics (from August 1, 1965).
- ENRIQUE M. GALAN, M.D., Research Fellow in Pediatrics (from January 1, 1966).
- GARABED H. GARABADIAN, M.D., Research Fellow in Pediatrics.
- MARY A. GIAMBATTISTA, M.D., Research Fellow in Pediatrics.
- MARY C. GOODCHILD, M.B., B.S., Research Fellow in Pediatrics (from September 1, 1965).
- MARGARET C. HEAGARTY, M.D., Research Fellow in Pediatrics.
- LEWIS B. HOLMES, M.D., Research Fellow in Pediatrics.
- MARGARET KEMBALL, M.B., B.S., Research Fellow in Pediatrics.
- ROBERTO R. KRETSCHMER, M.D., Research Fellow in Pediatrics.
- AYSUN KUSAKCIOGLU, M.D., Research Fellow in Pediatrics.
- ANDRE D. LASCARI, M.D., Research Fellow in Pediatrics (from August 1, 1965).
- PINCHAS LERMAN, M.D., Research Fellow in Pediatrics (appointment expired October 31, 1965).
- DENIS R. MILLER, M.D., Research Fellow in Pediatrics.
- WILLIAM W. MILLER, M.D., Research Fellow in Pediatrics.
- MADHU R. MODY, M.D., Research Fellow in Pediatrics.
- CHRISTOPHER H. NOURSE, M.B., CH.B., Research Fellow in Pediatrics (from August 1, 1965).
- CHRISTOPHER F. O'CONNOR, M.B., CH.B., Research Fellow in Pediatrics.
- VILMA PIEDRAHITA, M.D., Research Fellow in Pediatrics (from September 1, 1965).
- WILLIAM H. PLAUTH, M.D., Research Fellow in Pediatrics.
- BERRY I. PLESS, M.D., Research Fellow in Pediatrics.
- ALBERT C. PRICE, M.D., Research Fellow in Pediatrics.
- GEORGE L. ROBB, M.D., Research Fellow in Pediatrics (from August 1, 1965).
- JOHN C. ROBINSON, M.D., Research Fellow in Pediatrics.
- MILANA P. ROLOVIC, M.D., Research Fellow in Pediatrics (appointment expired September 30, 1965).
- AMMON ROSENTHAL, M.D., Research Fellow in Pediatrics.

PEDIATRICS

ANNE-MARIE SCHINDLER, M.D., Research Fellow in Pediatrics.

ELIAS SCHWARTZ, M.D., Research Fellow in Pediatrics (from August 1, 1965).

MYRON SINER, M.D., CH.B., Research Fellow in Pediatrics.

ALBERT W. SPARROW, M.D., Research Fellow in Pediatrics.

JAMES R. TIERNAN, M.B., B.S., Research Fellow in Pediatrics.

WILLEM VANPELT, M.D., Research Fellow in Pediatrics.

HENRY R. WAGNER, M.D., Research in Pediatrics.

TIMPLE GO WEE, M.D., Research Fellow in Pediatrics.

WELDIMIR WERTELECKI, M.D., Research Fellow in Pediatrics (from August 1, 1965).

CATHERINE M. WILFERT, M.D., Research Fellow in Pediatrics.

WILLIAM E. BOYLE, M.D., Teaching Fellow in Pediatrics.

FREDERICK P. A. CAPPS, M.B., B.S., Teaching Fellow in Pediatrics.

JOHN M. COHEN, M.D., Teaching Fellow in Pediatrics.

VAZKEN M. DER KALOUSTIAN, M.D., Teaching Fellow in Pediatrics.

JAGDISH M. GUPTA, M.B., B.S., Teaching Fellow in Pediatrics.

THORLAKUR S. HALLDORSSON, M.D., Teaching Fellow in Pediatrics.

JAMES P. KEATING, M.D., Teaching Fellow in Pediatrics.

WILLIAM C. MENTZER, JR., M.D., Teaching Fellow in Pediatrics.

GARY J. MYERS, M.D., Teaching Fellow in Pediatrics.

CATHLEEN C. O'BRIEN, M.D., Teaching Fellow in Pediatrics.

SOL ROCKENMACHER, M.D., Teaching Fellow in Pediatrics.

ARNOLD L. SMITH, M.D., Teaching Fellow in Pediatrics.

RICHARD C. TALAMO, M.D., Teaching Fellow in Pediatrics.

GABRIEL S. ZATLIN, M.D., Teaching Fellow in Pediatrics.

Affiliated:

CHARLES F. BARLOW, M.D., Bronson Crothers Professor of Neurology and Head of the Department at The Children's Hospital.

SIDNEY FARBER, M.D., Professor of Pathology at The Children's Hospital.

GEORGE E. GARDNER, M.D., Professor of Psychiatry at The Children's Hospital.

HARVARD MEDICAL SCHOOL

EDWARD B. D. NEUHAUSER, M.D., Clinical Professor of Radiology.
WILLIAM M. SCHMIDT, M.D., Professor of Maternal and Child Health, S.P.H.

THOMAS H. WELLER, M.D., Richard Pearson Strong Professor of Tropical Public Health, S.P.H.

PHILIP R. DODGE, M.D., Assistant Professor of Neurology at the Massachusetts General Hospital.

JANET W. MCARTHUR, M.D., Associate Clinical Professor of Medicine.

MORTON N. SWARTZ, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

PETER H. WOLFF, M.D., Assistant Professor of Psychiatry at The Children's Hospital.

EZIO MERLER, Ph.D., Research Associate in Biological Chemistry.

TULLY BENARON, M.D., Instructor in Psychiatry.

RICHARD GALDSTON, M.D., Instructor in Psychiatry.

RICHMOND HOLDER, M.D., Instructor in Psychiatry.

JOHN H. LAMONT, M.D., Instructor in Psychiatry.

MARY L. L. SCHOLL, M.D., Instructor in Neurology.

DEXTER M. BULLARD, JR., M.D., Assistant in Psychiatry.

Required Courses

PEDIATRICS. *Second Year.*—During appropriate sections of the period devoted to correlative teaching in the second semester, pediatric lectures are given on adjustments of respiration, renal regulation, digestion and metabolism, and endocrinology, in early life. Participation by members of the Department of Pediatrics in laboratory and demonstration exercises devoted to these and other body systems further introduces concepts of growth and development into the study of morphology and function in this period.

PEDIATRICS. *Introduction to the Clinic.*—The student is taught the special aspects of infants and children as patients by those Department members attached to the hospital to which he is assigned for the course in Introduction to the Clinic.

PEDIATRICS. *Principal Clinical Year.*—Pediatrics is taught intensively to one-eighth of the class at a time for six weeks at either

PEDIATRICS

The Children's Hospital Medical Center or the Massachusetts General Hospital. Insofar as possible, students "introduced to the clinic" at one hospital will be assigned for this six weeks of pediatrics to another. By classroom demonstrations and, especially, by working in small supervised sections in the wards and outpatient clinics, students learn by participation the prevention, diagnosis, and treatment of disease in infants and children, and the care of the well child.

SECOND YEAR

HOURS

Clinical lectures. C.H.M.C. Second half year

4

INTRODUCTION TO THE CLINIC

Clinical Instruction.

PRINCIPAL CLINICAL YEAR

Clinical Clerkship. C.H.M.C., M.G.H.

240

Fourth Year Elective Courses

BLOCK COURSES

- 501M. General Pediatrics—Wards. Drs. JANEWAY, DIAMOND, and BERENBERG.
- 502M. General Pediatrics—Ambulatory Services. Dr. CONE.
- 503M. Pediatric Practice in a Rural Area. Dr. R. BERG.
- 504M. Family Health Care Program—Short Course. Dr. ALPERT and ASSOCIATES.
- 505M. Ambulatory Medical Care. Drs. ALPERT and WALKER.
- 506M. Medical Care of Adolescents. Dr. J. R. GALLAGHER and ASSOCIATES.
- 507M. Cardiology. Dr. NADAS and ASSOCIATES.
- 508M. Endocrinology and Metabolism I. Dr. CRIGLER and ASSOCIATES.
- 509M. Clinical Genetics. Dr. GERALD and ASSOCIATES.
- 510M. Hematology I. Dr. DIAMOND and ASSOCIATES.
- 511M. Neonatal Pediatrics. Dr. C. A. SMITH and ASSOCIATES.
- 512M. Neoplastic Diseases. Dr. FARBER and ASSOCIATES.
- 513M. Clinical Nutrition. Dr. SHWACHMAN and ASSOCIATES.
- 514M. Diseases of Protein Metabolism and Immunologic Responses. Dr. F. S. ROSEN and ASSOCIATES.
- 515M. Renal Metabolism. Dr. FELLERS and ASSOCIATES.
- 516M. Rheumatic Fever and Rheumatic Heart Disease. Drs. MASSELL, MICHAEL, and ASSOCIATES.
- 517M. Pediatric Neurology. Dr. C. F. BARLOW. (*Same course as Neurology 503M.*)
- 518M. General Pediatrics. Dr. TALBOT.

HARVARD MEDICAL SCHOOL

- 519M. Metabolism and Endocrinology. Dr. CRAWFORD.
520M. Behavioral Aspects of Pediatric Medicine. Dr. KEARSLEY and ASSOCIATES.
521M. Ambulatory Pediatrics. Dr. CONNELLY.
522M. Pediatric Neurology I. Dr. DODGE. (*Same course as Neurology 506M.*)
523M. Pediatric Neurology II. Dr. DODGE. (*Same course as Neurology 507M.*)
524M. Pediatric Neurology. Dr. MOSER. (*Same course as Neurology 508M.*)
525M. Pediatric Surgery. Dr. HENDREN. (*Same course as Surgery 513M.*)
526M. Infectious Disease. Dr. L. WEINSTEIN.

BLOCK COURSES — RESEARCH

801. Endocrinology and Metabolism II. Dr. CRIGLER and ASSOCIATES.
802. Hematology II. Dr. DIAMOND and ASSOCIATES.
803. Infectious Diseases. Dr. S. KATZ and ASSOCIATES.

LONGITUDINAL COURSES

701. Pediatric Urologic Problems. Dr. PERLMUTTER. (*Same course as Surgery 704.*)
702M. Family Health Care Program. Drs. ALPERT, BULLARD, SIDEL, ROBINS, and ASSOCIATES. (*Also listed in Interdepartmental Section.*)

PHARMACOLOGY

DEPARTMENT OF PHARMACOLOGY

OTTO KRAYER, M.D., A.M. (hon.), M.D. (hon.), Gustavus Adolphus Pfeiffer Professor of Pharmacology, and Head of the Department.

DAVID H. HUBEL, M.D., A.M. (hon.), Professor of Neurophysiology.

STEPHEN W. KUFFLER, M.D., A.M. (hon.), Robert Winthrop Professor of Neurophysiology and Neuropharmacology.

PAUL L. MUNSON, PH.D., A.M. (hon.), Professor of Pharmacology in the School of Dental Medicine.

ULLRICH G. TRENDELENBURG, M.D., PH.D., A.M. (hon.), Associate Professor of Pharmacology.

JOHN R. BLINKS, M.D., Assistant Professor of Pharmacology.

WERNER E. FLACKE, M.D., Assistant Professor of Pharmacology.

EDWIN J. FURSHPAN, PH.D., Assistant Professor of Neurophysiology and Neuropharmacology.

OLEG JARDETSKY, M.D., PH.D., Assistant Professor of Pharmacology (on leave July 1, 1965 through June 30, 1966).

ROGER T. KELLEHER, PH.D., Assistant Professor of Pharmacology.

JAN KOCH-WESER, M.D., Assistant Professor of Pharmacology (from January 1, 1966).

EDWARD A. KRAVITZ, PH.D., Assistant Professor of Neuropharmacology and Neurophysiology (from January 1, 1966).

MARTIN LUBIN, M.D., PH.D., Assistant Professor of Pharmacology (on leave September 1, 1965 through June 30, 1966).

JEAN M. MARSHALL, PH.D., Assistant Professor of Pharmacology (resigned January 31, 1966).

WILLIAM H. MORSE, PH.D., Assistant Professor of Psychology in the Department of Pharmacology.

DAVID D. POTTER, PH.D., Assistant Professor of Neurophysiology and Neuropharmacology.

HUGUES J. P. RYSER, M.D., Assistant Professor of Pharmacology.

HARVARD MEDICAL SCHOOL

FREDERICK C. UHLE, PH.D., Assistant Professor of Chemistry in the Department of Pharmacology.

DOUGLAS R. WAUD, M.D., Assistant Professor of Pharmacology.

NORMAN WEINER, M.D., Assistant Professor of Pharmacology.

PAUL R. DRASKOCZY, M.D., Associate in Pharmacology

JAN KOCH-WESER, M.D., Associate in Pharmacology (through December 31, 1965).

EDWARD A. KRAVITZ, PH.D., Associate in Neurophysiology and Neuropharmacology (through December 31, 1965).

LINCOLN T. POTTER, M.D., Associate in Pharmacology.

ARMEN H. TASHJIAN, JR., M.D., Associate in Pharmacology in the School of Dental Medicine.

PAVEL BRAVENY, M.D., Research Associate in Pharmacology (from January 1, 1966).

JANE Y. C. CHEN, B.S., Research Associate in Neurophysiology and Neuropharmacology.

PETER OFNER, PH.D., Research Associate in Pharmacology in the School of Dental Medicine.

SALOMON Z. LANGER, M.D., Instructor in Pharmacology.

GEOFFREY W. G. SHARP, PH.D., Instructor in Pharmacology.

NORIO TAIRA, M.D., Instructor in Pharmacology (January 1 through March 31, 1966).

CHRISTOPHER D. THRON, M.D., Instructor in Pharmacology (resigned September 30, 1965).

TSUI-HSIEN TSAI, PH.D., Instructor in Pharmacology (resigned August 31, 1965).

ADAWIA A. ALOUSI, PH.D., Research Fellow in Pharmacology (appointment expired July 31, 1965).

ROBERT T. ANSELM, PH.D., Research Fellow in Pharmacology (from August 1, 1965).

DIMITRIJE ATANACKOVIC, M.D., Research Fellow in Pharmacology (appointment expired September 30, 1965).

VERA ATANACKOVIC, M.D., Research Fellow in Pharmacology (appointment expired September 30, 1965).

JOSEPH CHAMBERLAIN, PH.D., Research Fellow in Pharmacology in the School of Dental Medicine (resigned October 8, 1965).

PHARMACOLOGY

MONROE W. COHEN, PH.D., Research Fellow in Neurophysiology and Neuropharmacology (from October 1, 1965).

GORDON L. COPPOC, D.V.M., Research Fellow in Pharmacology.

MARIE-PIERRE I. GABATHULER, M.S., Research Fellow in Pharmacology.

RICHARD A. GILLIS, PH.D., Research Fellow in Pharmacology.

RONALD HANCOCK, PH.D., Research Fellow in Pharmacology (resigned September 30, 1965).

SUSAN D. IVERSEN, PH.D., Research Fellow in Pharmacology (from September 1, 1965).

FU-LI LEE, M.D., Research Fellow in Pharmacology.

DONALD E. McMILLAN, PH.D., Research Fellow in Pharmacology.

ASAO NAKAMURA, D.Sc., Research Fellow in Pharmacology.

JOHN G. NICHOLLS, PH.D., M.B., B.S., Research Fellow in Neurophysiology and Neuropharmacology (appointment expired August 31, 1965).

CAMILLE B. OLSON, PH.D., Research Fellow in Pharmacology (from August 15, 1965).

RICHARD K. ORKAND, PH.D., Research Fellow in Neurophysiology and Neuropharmacology.

MASANORI OTSUKA, M.D., Research Fellow in Neurophysiology and Neuropharmacology.

MIRJANA RABADJICA, M.D., Research Fellow in Pharmacology (from November 1, 1965).

HERMAN W. REAS, M.D., Research Fellow in Pharmacology.

UTE I. RICHARDSON, PH.D., Research Fellow in Pharmacology.

JEFFREY K. SAELENS, PH.D., Research Fellow in Pharmacology.

JUDSON D. SHERIDAN, D.PHIL., Research Fellow in Neurophysiology and Neuropharmacology (from September 1, 1965).

CHARLES B. SMITH, M.D., Research Fellow in Pharmacology.

NORIO TAIRA, M.D., Research Fellow in Pharmacology (through December 31, 1965).

EMRYS W. THOMAS, PH.D., Research Fellow in Pharmacology.

GEORGE E. VAILLANT, M.D., Research Fellow in Pharmacology (from August 1, 1965).

HARVARD MEDICAL SCHOOL

CORNELIS G. VAN DONGON, PH.D., Research Fellow in Pharmacology (resigned January 31, 1966).

Affiliated:

PETER B. DEWS, M.B., CH.B., PH.D., A.M., (Hon.), Stanley Cobb Professor of Psychiatry and Psychobiology.

TORSTEN N. WIESEL, M.D., Assistant Professor of Neurophysiology in the Department of Psychiatry.

WALTER R. BURACK, M.D., Clinical Associate in Medicine.

MILTON H. ALPER, M.D., Clinical Associate in Anesthesia.

DAVID E. WOLFE, M.D., Instructor in Anatomy.

Required Course

PHARMACOLOGY A. *Second Year.*—The course in Pharmacology consists of lectures, demonstrations, experimental laboratory exercises and conferences. Concepts of general importance in pharmacology and toxicology are presented and the opportunity is provided for students to become acquainted with important drugs. Emphasis is placed on those actions of pharmacological agents which help in understanding the disordered physiology of disease and which are of importance in the rational treatment of disease. The mode of action of important drugs is discussed. In the laboratory, the student is able to become acquainted at first hand with some of the experimental facts, obtained from studies on man and animals, which provide the starting points for the analysis of pharmacological effects.

SECOND YEAR

HOURS

Lectures. Dr. KRAYER and ASSOCIATES. One hour, three times a week: Tuesday, Thursday and Saturday mornings, first half year. Members of the staff of the Department of Pharmacology will continue the teaching of Pharmacology in collaboration with other departments in the integrated program of the second half year.

Laboratory work and conferences. Dr. KRAYER and ASSOCIATES. Tuesday mornings, first half year. Further exercises in Pharmacology will be conducted as part of the integrated program of the second half year.

120

PHARMACOLOGY

Fourth Year Elective Courses

BLOCK COURSES — RESEARCH

- 801. Substances Affecting the Circulatory System. Dr. KRAYER. (*Same course as Pharmacology 301, Faculty of Arts and Sciences.*)
- 802. Structural and Synthetic Studies of Steroid and Indole Alkaloids. Dr. UHLE. (*Same course as Pharmacology 302, Faculty of Arts and Sciences.*)
- 803. Endocrine Pharmacology. Dr. MUNSON.
- 804. Molecular Structure and Biological Activity. Dr. JARDETZKY. Will not be offered in 1965-1966.
- 805. Pharmacology of Autonomic Nervous System. Dr. TRENDELENBURG. (*Same course as Pharmacology 309, Faculty of Arts and Sciences.*)
- 806. Metabolism of Biologically Active Amines. Drs. WEINER and DRASKOCZY.
- 807. Selected Topics in Pharmacology and Physiology of Cardiac and Smooth Muscle. Dr. MARSHALL. (*Same course as Pharmacology 311, Faculty of Arts and Sciences.*)
- 808. Myocardial Contraction; a Consideration of the Performance of the Heart from the Point of View of Muscle Physiology. Dr. BLINKS.
- 809. Action of Drugs on Sensory Receptors and Resulting Autonomic Changes. Dr. W. E. FLACKE.
- 810. Receptor Theory. Investigation of the Mechanism Relating Dose of a Drug and its Stimulant or Blocking Activity. Dr. WAUD.
- 811. Central Nervous System Physiology. Dr. HUBEL.
- 812. Transport Processes Related to Pinocytosis as Studied in Tissue Cultures. Dr. RYSER. (*Same course as Pharmacology 319, Faculty of Arts and Sciences.*)
- 813. Neurochemistry of Catecholamines or Acetylcholine. Dr. L. T. POTTER. (*Same course as Pharmacology 320, Faculty of Arts and Sciences.*)
- 814. Experimental Analysis of Behavior and of Drugs Affecting Behavior in Laboratory Animals. Drs. DEWS, MORSE, and KELLEHER. (*Same course as Psychiatry 804.*)

LONGITUDINAL COURSES

- 701. Selected Topics in Pharmacology. Dr. KRAYER and ASSOCIATES.
- 702. Pharmacotherapeutics. Dr. KOCH-WESER, ASSOCIATES, and MEMBERS OF THE DEPARTMENT OF MEDICINE. (*Same course as Medicine 716.*)
- 703. Molecular Structure and Biological Specificity. Dr. JARDETZKY. Will not be offered in 1965-1966.
- 704. Seminars in Neurophysiology and Neuropharmacology. Drs. KUFFLER, FURSHPAN, and D. D. POTTER.
- 705. Endocrinology. (The Adrenal Cortex). Dr. MUNSON and ASSOCIATES. (*Same course as Pharmacology 202, Faculty of Arts and Sciences.*)

HARVARD MEDICAL SCHOOL

DEPARTMENT OF PHYSIOLOGY

EUGENE M. LANDIS, M.D., PH.D., S.M. (hon.), A.M. (hon.),
George Higginson Professor of Physiology, and Head of the
Department.

A. CLIFFORD BARGER, M.D., Robert Henry Pfeiffer Professor of
Physiology.

JOHN R. PAPPENHEIMER, PH.D., Career Investigator of the Amer-
ican Heart Association, and Visiting Professor of Physiology.

*ARTHUR K. SOLOMON, PH.D., D.PHIL., Associate Professor of
Biophysics.

THOMAS H. WILSON, M.D., PH.D., A.M. (hon.), Associate Pro-
fessor of Physiology (on leave July 1, 1965 through June 30,
1966).

PETER F. CURRAN, PH.D., Assistant Professor of Biophysics.

LEON GOLDSTEIN, PH.D., Assistant Professor of Physiology.

ELWOOD HENNEMAN, M.D., Assistant Professor of Physiology, and
Ella Sachs Plotz Fellow in Physiology.

DONALD L. D. CASPAR, PH.D., Lecturer on Biophysics at The
Children's Hospital.

CAROLYN COHEN, PH.D., Lecturer on Biophysics at the Children's
Hospital.

DAVID A. GOLDSTEIN, M.D., Lecturer on Biophysics (resigned
September 7, 1965).

ROBERT LANGRIDGE, PH.D., Lecturer on Biophysics.

RICHARD D. BERLIN, M.D., Associate in Physiology.

JARED M. DIAMOND, PH.D., Associate in Biophysics.

HENRY M. GOODMAN, PH.D., Associate in Physiology.

S. RICHARD HEISEY, S.D., Associate in Physiology.

JAMES A. HERD, M.D., Associate in Physiology.

ERNEST PAGE, M.D., Associate in Biophysics.

STANLEY G. SCHULTZ, M.D., Associate in Biophysics.

WOLFGANG EPSTEIN, M.D., Research Associate in Biophysics
(from August 1, 1965).

* Appointment under the Committee on Medical Research in Biophysics.

PHYSIOLOGY

- TRACY B. MILLER, PH.D., Research Associate in Physiology.
- WILLIAM SIMON, PH.D., Research Associate in Physiology.
- MUTTAIYA SUNDARALINGHAM, PH.D., Research Associate in Biophysics (from August 15, 1965).
- MARVIN L. ZATZMAN, PH.D., Research Associate in Biophysics (from January 1, 1966).
- SAMUEL CAPLAN, PH.D., Instructor in Biophysics (from September 1, 1965).
- VLADIMIR FENCL, M.D., Instructor in Physiology (appointment expired September 30, 1965).
- CARL J. BENTZEL, M.D., Research Fellow in Biophysics.
- ALAN G. BIRTCH, M.D., Research Fellow in Physiology.
- ROBERT C. CANTU, M.D., Research Fellow in Physiology.
- RONALD A. CHEZ, M.D., Research Fellow in Biophysics.
- JOHN E. CHIMOSKY, M.D., Research Fellow in Physiology.
- HELEN F. CSERR, PH.D., Research Fellow in Physiology.
- MARTIN DAVIES, PH.D., Research Fellow in Biophysics (from September 1, 1965).
- MICHAEL FIELD, M.D., Research Fellow in Biophysics.
- ROBERT E. FUISZ, M.D., Research Fellow in Biophysics.
- DAVID GOLDMAN, M.D., Research Fellow in Biophysics.
- CHARLES D. HOLDSWORTH, M.B., CH.B., Research Fellow in Physiology (appointment expired August 31, 1965).
- LESLIE L. IVERSEN, PH.D., Research Fellow in Neurophysiology (from September 1, 1965).
- LEEROY G. JONES, M.D., Research Fellow in Physiology (from September 15, 1965).
- LORNE M. MENDELL, PH.D., Research Fellow in Physiology (from September 15, 1965).
- SARA J. PATKIN, PH.D., Research Fellow in Physiology.
- BRUCE H. POMERANZ, M.D., Research Fellow in Physiology.
- GILLIAN RICH, PH.D., Research Fellow in Biophysics (from October 15, 1965).
- JAMES M. SCHOOLER, JR., PH.D., Research Fellow in Physiology (appointment expired January 31, 1966).

HARVARD MEDICAL SCHOOL

WALTER N. SCOTT, M.D., Research Fellow in Biophysics (appointment expired August 31, 1965).

RAMADAN SHA'AFI, PH.D., Research Fellow in Biophysics (from September 15, 1965).

HARVEY V. SPARKS, JR., M.D., Research Fellow in Physiology.

AUBREY TAYLOR, PH.D., Research Fellow in Biophysics (from September 1, 1965).

ERNEST M. WRIGHT, PH.D., Research Fellow in Biophysics (from October 1, 1965).

RICHARD M. ZAKHEIM, M.D., Research Fellow in Physiology.

HERBERT H. WINKLER, A.B., Teaching Fellow in Physiology.

Affiliated:

JAMES T. IRVING, PH.D., M.D., Professor of Physiology at the Forsyth Dental Infirmary for Children.

JEAN MAYER, PH.D., D.Sc., Associate Professor of Nutrition, S.P.H.

MILES A. CRENSHAW, PH.D., Instructor in Physiology at the Forsyth Dental Infirmary for Children.

STEPHEN S. ROTHMAN, D.D.S., PH.D., Instructor in Physiology at the School of Dental Medicine.

Required Course

PHYSIOLOGY A. *First Year.* — During the first semester, as an introduction to physiology, lectures are designed to acquaint the student with the fundamental aspects of cardiovascular physiology and to consider in detail those portions of the subject that are essential to an understanding of the phenomena of health and disease in man. By means of laboratory exercises the student is introduced to the observational methods and techniques available for studying cardiovascular function in man. Then emphasis is placed upon exercises illustrating in animals the experimental procedures employed for the detailed analysis of function and for the acquisition of a fundamental knowledge of cardiovascular physiology. Conferences and demonstrations supplement the more formal instruction.

During the second semester the lectures and laboratory work in

PHYSIOLOGY

physiology are interwoven with those given by the Departments of Anatomy and Biological Chemistry.

Principles of gastrointestinal physiology and endocrinology are taught in the first five week period. The fate of ingested food stuffs is described including the secretion of enzymes, digestion in the gastrointestinal tract and absorption of these products of digestion. The functions of the liver are considered, with special emphasis on those related to the secretion of bile. The endocrine regulation of metabolism, growth and reproduction is presented, with laboratory work conducted in small groups. These exercises are designed to illustrate special techniques currently employed in endocrine research.

In the second five weeks selected topics in renal and pulmonary physiology are presented, with discussion of glomerular filtration, active transport, mechanics of breathing, gas transport and gas exchange in the lungs. The role of the kidneys and lungs in maintaining acid-base balance illustrates the interrelationships of the two systems.

The third period, duration six weeks, is devoted to neurosciences, beginning with consideration of conduction, excitation and inhibition as physico-chemical events at nerve membranes. The motor systems are surveyed in ascending fashion, beginning with muscles and continuing through the spinal cord and brainstem to the cerebral cortex. Sensory systems are considered with special emphasis on vision. Higher level function, such as sleep and consciousness, are discussed in the final week.

FIRST YEAR

HOURS

Lectures and laboratory work. Drs. BARGER, BERLIN, CURRAN, GOLDSTEIN, GOODMAN, HEISEY, HENNEMAN, HERD, LANDIS, PAPPENHEIMER, SIMON, SOLOMON, and WILSON. 220

Fourth Year Elective Courses

BLOCK COURSE

501. Teaching Assistantships in Physiology. Drs. GOLDSTEIN, GOODMAN, HEISEY, and WILSON.

BLOCK COURSES — RESEARCH

801. Cellular Physiology; Enzymatic Regulation. Dr. BERLIN. (*Same course as Physiology 313, Faculty of Arts and Sciences.*)

HARVARD MEDICAL SCHOOL

- 802. Cerebrospinal Fluid; Comparative Physiology. Dr. HEISEY.
- 803. Circulatory Physiology: Autonomic Control of the Cardiovascular System. Dr. HERD. (*Same course as Physiology 305, Faculty of Arts and Sciences.*)
- 804. Circulatory Physiology: Capillary Blood Vessels. Dr. LANDIS. (*Same course as Physiology 301, Faculty of Arts and Sciences.*)
- 805. Circulatory Physiology: Cardiovascular and Renal Function. Dr. BARGER. (*Same course as Physiology 303, Faculty of Arts and Sciences.*)
- 806. Central Nervous System: Synaptic Transmission, Spinal Reflexes. Dr. HENNEMAN. (*Same course as Physiology 304, Faculty of Arts and Sciences.*)
- 807. Endocrine Regulation of Growth and Metabolism. Dr. GOODMAN. (*Same course as Physiology 312, Faculty of Arts and Sciences.*)
- 808. Intestinal Absorption. Dr. WILSON. (*Same course as Physiology 306, Faculty of Arts and Sciences.*) Will not be offered 1965-1966.
- 809. Physiology of Cerebral Fluids. Dr. PAPPENHEIMER.
- 810. Renal Physiology and Regulation. Dr. GOLDSTEIN.
- 811. Mathematics and Computers in Physiology. Dr. W. SIMON.
- 821. Transport Processes in Biological Membranes. Dr. A. K. SOLOMON. (*Same course as Biophysics 301, Faculty of Arts and Sciences.*)
- 822. Mechanism of Ion Transport in Intestine and Frog Skin. Dr. CURRAN. (*Same course as Biophysics 303, Faculty of Arts and Sciences.*)
- 823. Molecular Organization and Assembly of Biological Structures. Dr. CASPAR. (*Same course as Biophysics 306, Faculty of Arts and Sciences.*)
- 825. Structural Aspects of Muscle Contraction and Blood Coagulation. Dr. C. COHEN. (*Same course as Biophysics 308, Faculty of Arts and Sciences.*)
- 826. Fluid Transport in Vertebrates. Dr. J. DIAMOND. (*Same course as Biophysics 309, Faculty of Arts and Sciences.*)
- 827. Structure of Nucleic Acids and Nucleoproteins. Dr. LANGRIDGE. (*Same course as Biophysics 307, Faculty of Arts and Sciences.*)

LONGITUDINAL COURSE

- 701. Selected Topics in Physiology. Drs. PAPPENHEIMER and D. D. POTTER. (*Same course as Physiology 202, Faculty of Arts and Sciences.*)

PREVENTIVE MEDICINE

DEPARTMENT OF PREVENTIVE MEDICINE

DAVID D. RUTSTEIN, M.D., Ridley Watts Professor of Preventive Medicine, and Head of the Department.

OSLER L. PETERSON, M.D., Visiting Professor of Preventive Medicine.

DAVID C. POSKANZER, M.D., Assistant Professor of Preventive Medicine.

LEONARD W. CRONKHITE, JR., M.D., Lecturer on Preventive Medicine.

JOHN G. FREYMAN, M.D., Lecturer on Preventive Medicine.

SIDNEY S. LEE, M.D., Lecturer on Preventive Medicine.

FRANCIS L. MUSSELLS, M.D., C.M., Lecturer on Preventive Medicine.

THEODORE COLTON, S.D., Associate in Preventive Medicine.

WILLIAM B. KANNEL, M.D., Clinical Associate in Preventive Medicine.

RALPH S. PAFFENBARGER, JR., M.D., DR.P.H., Clinical Associate in Preventive Medicine.

VICTOR W. SIDEL, M.D., Associate in Preventive Medicine.

MURRAY EDEN, PH.D., Lecturer on Preventive Medicine.

LEON J. TAUBENHAUS, M.D., Lecturer on Preventive Medicine.

ALEXANDER M. BURGESS, JR., M.D., Research Associate in Preventive Medicine.

ROBERT C. BUXBAUM, M.D., Research Associate in Preventive Medicine.

WILLIAM P. CASTELLI, M.D., Research Associate in Preventive Medicine.

GARY D. FRIEDMAN, M.D., Research Associate in Preventive Medicine.

RITA J. NICKERSON, M.A., Research Associate in Preventive Medicine.

THOMAS F. WEISS, PH.D., Research Associate in Preventive Medicine.

HARVARD MEDICAL SCHOOL

PAUL S. LEVY, Sc.D., Instructor in Preventive Medicine (from January 1, 1966).

Affiliated:

WILLIAM G. COCHRAN, M.A., Professor of Statistics, A.&S.

ROBERT B. REED, Ph.D., Professor of Biostatistics, S.P.H.

JANE WORCESTER, Dr.P.H., Professor of Biostatistics and Epidemiology, S.P.H.

ALBERT DAMON, Ph.D., M.D., Associate Professor of Epidemiology, Research Fellow in Medical Anthropology, Lecturer on Anthropology, S.P.H.

LOUIS WEINSTEIN, Ph.D., M.D., Lecturer on Infectious Diseases.

JACOB J. FELDMAN, Senior Research Associate in Biostatistics, S.P.H.

The preventive aspects of medicine and its various specialties are taught in all departments of the Medical School, and arrangements are made for the integration of such teaching with the more formal teaching in the required course in preventive medicine. An effort is made to stress those aspects of preventive medicine which concern the practicing physician, rather than those which concern the public health officer.

Required Courses

QUANTITATIVE METHODS IN MEDICINE. *First Year.*—Dr. COLTON, Prof. COCHRAN, Prof. EDEN, and ASSOCIATES. Instruction in Quantitative Methods in Medicine is tailored to meet the mathematical and statistical background, the needs and the career aspirations of the individual student. Three simultaneous courses are given: Introductory Biostatistics, Intermediate Biostatistics, and Introductory Biomathematics. To be eligible for admission to the courses in Intermediate Biostatistics or in Introductory Biomathematics, the student with appropriate statistical and mathematical background must pass a qualifying examination with an honor grade.

Introductory Biostatistics. This course is concerned with the application of statistical reasoning to medicine and to the logical basis

PREVENTIVE MEDICINE

for reaching conclusions from numerical evidence through the systematic presentation of medical data, the analysis and interpretation of variation in biological measurements, methods governing the validity of inferences extrapolated from a sample to a population, and the recognition of common pitfalls and fallacies in the collection, analysis and interpretation of medical data. The course relies heavily on illustrative material from ongoing research and the current medical literature. Emphasis in this course is based on biostatistical principles for use by the future practicing physician as he encounters and interprets laboratory and diagnostic data, and as he critically reads the medical literature.

Intermediate Biostatistics. This intermediate course is concerned with the theory underlying the material presented in the Introductory Course and includes such additional statistical methods as correlation and regression, analysis of variance, non-parametric statistics and sequential analysis. The course is given from the point of view of the use of biostatistical principles by the medical and biological investigator.

Introductory Biomathematics. This mathematics course is concerned mainly with probability theory and the stochastic processes as they relate to the development and use of mathematical models in biological and medical research. Admission to this course is limited to those students whose mathematical background and competence are adequate to interpret recent applications of mathematics to the medical and biological sciences.

PREVENTIVE MEDICINE. *Principal Clinical Year.*—The course in preventive medicine consists of clinics lectures, and symposia. The preventive aspects of clinical medicine are correlated, with due regard for the rapid changes now going on in medical care, with information in the fields of epidemiology, biostatistics, social medicine, occupational medicine, medical economics, and environmental sanitation.

A Health Resources Survey, evaluating community facilities for the total medical care of specified patients, is required of all students.

FIRST YEAR

HOURS

QUANTITATIVE METHODS IN MEDICINE.—Lectures and laboratory seminar periods. Dr. COLTON, Prof. COCHRAN, Prof. EDEN, and ASSOCIATES.

15

HARVARD MEDICAL SCHOOL

PRINCIPAL CLINICAL YEAR

- Clinics, symposia, and lectures. Dr. RUTSTEIN, Dr. PETERSON, and ASSOCIATES, in cooperation with representatives of other departments. 70
Health Resources Survey and individual student conference. 50

Fourth Year Elective Courses

BLOCK COURSES

501. Advanced Preventive Medicine — General Survey Course. Dr. RUTSTEIN and ASSOCIATES.
502. Epidemiology. Drs. RUTSTEIN, POSKANZER, and KANNEL.
503. Advanced Preventive Medicine — Individual Teaching. Dr. RUTSTEIN and ASSOCIATES.
504M. Neurology and Preventive Medicine. Dr. POSKANZER. (*Same course as Neurology 511M.*)

BLOCK COURSES — RESEARCH

801. Biomathematics. Professor EDEN and ASSOCIATES.
802. Biostatistics. Dr. COLTON.
803. Epidemiology. Drs. POSKANZER and KANNEL.
804. Etiological Studies on Atherosclerosis. Dr. RUTSTEIN and ASSOCIATES.
805. Medical Care and Medical Economics. Dr. PETERSON and ASSOCIATES.

LONGITUDINAL COURSES

701. Biostatistics. The Design of Clinical Investigation. Drs. RUTSTEIN and COLTON.
702. Biostatistics. Design of Experiments. Professor COCHRAN. (*Same course as Statistics 140, Faculty of Arts and Sciences.*)
703. Biostatistics. Mathematical Statistics. Professor DEMPSTER. (*Same course as Statistics 190, Faculty of Arts and Sciences.*)

PSYCHIATRY

DEPARTMENT OF PSYCHIATRY

JACK R. EWALT, M.D., A.M. (hon.), Bullard Professor of Psychiatry, Head of the Department at the Massachusetts Mental Health Center and Chairman of the Executive Committee of the Department of Psychiatry.

ERICH LINDEMANN, PH.D., M.D., A.M. (hon.), Professor of Psychiatry, and Head of the Department at the Massachusetts General Hospital (retired October 31, 1965).

GERALD CAPLAN, M.D., D.P.M., Clinical Professor of Psychiatry.

PETER B. DEWS, M.B., CH.B., PH.D., A.M. (hon.), Stanley Cobb Professor of Psychiatry and Psychobiology.

GEORGE E. GARDNER, PH.D., M.D., Professor of Psychiatry at The Children's Hospital.

ELVIN V. SEMRAD, M.D., Clinical Professor of Psychiatry.

HENRY M. FOX, M.D., Associate Clinical Professor of Psychiatry.

LESTON L. HAVENS, M.D., Associate Clinical Professor of Psychiatry.

GREGORY ROCHLIN, M.D., Associate Clinical Professor of Psychiatry.

PHILIP SOLOMON, M.D., Associate Clinical Professor of Psychiatry.

JOHN P. SPIEGEL, M.D., Associate Clinical Professor of Psychiatry.

ALFRED H. STANTON, M.D., A.M. (hon.), Associate Professor of Psychiatry at the McLean Hospital.

ELIZABETH R. ZETZEL, M.D., Associate Clinical Professor of Psychiatry.

MORRIS E. CHAFETZ, M.D., Assistant Clinical Professor of Psychiatry.

THOMAS F. DWYER, M.D., Assistant Clinical Professor of Psychiatry.

STANLEY H. ELDRED, M.D., Assistant Professor of Psychiatry at the McLean Hospital.

FRANK R. ERVIN, M.D., Assistant Professor of Psychiatry at the Massachusetts General Hospital.

HARVARD MEDICAL SCHOOL

DANIEL H. FUNKENSTEIN, M.D., Assistant Professor of Psychiatry.
SANFORD R. GIFFORD, JR., M.D., Assistant Clinical Professor of Psychiatry.

LESTER GRINSPOON, M.D., Assistant Clinical Professor of Psychiatry.

LOUISA P. HOWE, PH.D., Assistant Professor of Sociology in the Department of Psychiatry.

BELLENDEEN R. HUTCHESON, M.D., Assistant Clinical Professor of Psychiatry.

ERIC H. LENNEBERG, PH.D., Assistant Professor of Psychiatry in the Department of Psychiatry at The Children's Hospital.

DANIEL J. LEVINSON, PH.D., Assistant Professor of Psychology in the Department of Psychiatry.

EDWARD A. MASON, M.D., Assistant Clinical Professor of Psychiatry.

JACK H. MENDELSON, M.D., Assistant Professor of Psychiatry at the Massachusetts General Hospital.

ELLIOT G. MISHLER, PH.D., Assistant Clinical Professor of Psychology in the Department of Psychiatry.

DAVID J. MYERSON, M.D., Assistant Clinical Professor of Psychiatry.

JOHN C. NEMIAH, M.D., Assistant Professor of Psychiatry, Acting Head of the Department at the Massachusetts General Hospital (from November 1, 1965), and Tutor in Psychiatry.

PETER E. SIFNEOS, M.D., Assistant Professor of Psychiatry at the Massachusetts General Hospital.

SAMUEL SILVERMAN, M.D., Assistant Clinical Professor of Psychiatry.

GEORGE A. TALLAND, PH.D., Assistant Professor of Psychology in the Department of Psychiatry.

AVERY D. WEISMAN, M.D., Assistant Clinical Professor of Psychiatry.

TORSTEN N. WIESEL, M.D., Assistant Professor of Neurophysiology in the Department of Psychiatry.

PETER H. WOLFF, M.D., Assistant Professor of Psychiatry at The Children's Hospital.

PSYCHIATRY

NORMAN E. ZINBERG, M.D., Assistant Clinical Professor of Psychiatry.

FRANCIS J. BRACELAND, M.D., Lecturer on Psychiatry.

ERIK H. ERIKSON, A.M. (hon.), Lecturer on Psychiatry.

HAROLD S. ALBERT, M.D., C.M., Clinical Associate in Psychiatry.

NORMAN W. BELL, PH.D., Associate in Sociology in the Department of Psychiatry at the McLean Hospital.

HOWARD T. BLANE, PH.D., Associate in Psychology in the Department of Psychiatry at The Massachusetts General Hospital.

SAMUEL BOJAR, M.D., Clinical Associate in Psychiatry.

GAYLORD P. COON, M.D., Clinical Associate in Psychiatry.

ROSE L. COSER, PH.D., Associate in Sociology in the Department of Psychiatry at the McLean Hospital.

EDWARD M. DANIELS, M.D., Clinical Associate in Psychiatry.

FRANK C. D'ELSEAUX, M.D., Clinical Associate in Psychiatry.

HENRY U. GRUNEBaum, M.D., Clinical Associate in Psychiatry.

LESTER L. HASENBUSH, M.D., Clinical Associate in Psychiatry.

HOWARD T. HERMANN, M.D., Associate in Psychiatry at the McLean Hospital.

PAUL M. HOWARD, M.D., Clinical Associate in Psychiatry.

RALPH J. KAHANA, M.D., Clinical Associate in Psychiatry.

MERTON J. KAHNE, M.D., Clinical Associate in Psychiatry.

STANLEY S. KANTER, M.D., Clinical Associate in Psychiatry.

SIDNEY LEVIN, M.D., Clinical Associate in Psychiatry.

ALFRED O. LUDWIG, M.D., Clinical Associate in Psychiatry.

JOHN E. MACK, M.D., Clinical Associate in Psychiatry.

JOHN M. MACKENZIE, M.D., Clinical Associate in Psychiatry.

ELIZABETH S. MAKKAY, M.D., Associate in Psychiatry at The Children's Hospital.

ROBERT H. MCCARTER, M.D., Clinical Associate in Psychiatry.

DORIS MENZER-BENARON, M.D., Clinical Associate in Psychiatry
(on leave July 1, 1965 through June 30, 1966).

JOSEPH J. MICHAELS, M.D., Clinical Associate in Psychiatry.

ARNOLD H. MODELL, M.D., Clinical Associate in Psychiatry.

BENJAMIN J. MURAWSKI, PH.D., Associate in Psychology in the Department of Psychiatry.

HARVARD MEDICAL SCHOOL

WILLIAM F. MURPHY, PH.B., M.D., Clinical Associate in Psychiatry.

CECIL MUSHATT, M.D., Clinical Associate in Psychiatry.

GARDNER C. QUARTON, M.D., Clinical Associate in Psychiatry.

RHONA V. RAPOPORT, PH.D., Associate in Sociology in the Department of Psychiatry.

BENJAMIN C. RIGGS, M.D., Clinical Associate in Psychiatry.

EDWARD J. SACHAR, M.D., Associate in Psychiatry.

DAVID SHAPIRO, PH.D., Associate in Psychology in the Department of Psychiatry.

ALAN A. STONE, M.D., Associate in Psychology at the McLean Hospital.

LAURENCE D. TREVETT, M.D., Clinical Associate in Psychiatry.

ARTHUR F. VALENSTEIN, M.D., Clinical Associate in Psychiatry.

JOHN VORENBERG, M.D., Associate in Psychiatry at the Beth Israel Hospital.

JUSTIN L. WEISS, PH.D., Clinical Associate in Psychology in the Department of Psychiatry.

HENRY WERMER, M.D., Clinical Associate in Psychiatry.

DONALD WEXLER, M.D., Clinical Associate in Psychiatry.

LOUIS S. CHASE, M.D., Lecturer on Psychiatry.

MARC A. FRIED, PH.D., Lecturer on Psychology in the Department of Psychiatry.

MILTON GREENBLATT, M.D., Lecturer on Psychiatry.

LEWIS B. KLEBANOFF, PH.D., Lecturer on Psychology in the Department of Psychiatry (from December 1, 1965).

DAVID C. MADDISON, M.B., CH.B., D.P.M., Lecturer on Psychiatry (appointment expired July 12, 1965).

CHARLES A. PINDERHUGHES, M.D., Lecturer on Psychiatry

EVEOLEEN N. REXFORD, M.D., Lecturer on Psychiatry.

LEON N. SHAPIRO, M.D., Lecturer on Psychiatry.

ROBERT S. WEISS, PH.D., Lecturer on Sociology in the Department of Psychiatry.

CLINT D. ANDERSON, PH.D., Research Associate in Psychology in the Department of Psychiatry (from October 1, 1965).

PSYCHIATRY

- FRANK BAKER, PH.D., Research Associate in Psychology in the Department of Psychiatry (from September 1, 1965).
- RICHARD J. BONIER, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- AYDIN CANKARDAS-WYSOCKI, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- ANDREW B. CRIDER, PH.D., Research Associate in Psychology in the Department of Psychiatry (from February 1, 1966).
- GERALD E. CUBELLI, M.S., Research Associate in Psychiatry.
- ALBERTO DIMASCIO, PH.D., Research Associate in Psychology in the Department of Psychiatry
- ARTHUR S. ELSTEIN, PH.D., Research Associate in Psychology in the Department of Psychiatry (from November 1, 1965).
- MIRIAM F. FIEDLER, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- FRANKLIN B. FOGELSON, PH.D., Research Associate in Social Welfare in the Department of Psychiatry.
- WARREN E. FOOTE, JR., PH.D., Research Associate in Psychology in the Department of Psychiatry (from December 1, 1965).
- PEGGY J. GOLDE, PH.D., Research Associate in Social Anthropology in the Department of Psychiatry (resigned August 31, 1965).
- GEORGE GROSSER, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- ROBERT H. HARRISON, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- DOROTHY S. HUNTINGTON, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- DAVID J. INGLE, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- ROBERT L. JAMES, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- HELEN J. KENNEY, ED.D., Research Associate in Psychology in the Department of Psychiatry.
- PHILIP E. KUBZANSKY, PH.D., Research Associate in Psychology in the Department of Psychiatry.

HARVARD MEDICAL SCHOOL

- FREDERIC M. LEVINE, PH.D., Research Associate in Psychology in the Department of Psychiatry (from October 1, 1965).
- JOSEPH MAYER, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- PETER J. M. McEWAN, Research Associate in Sociology in the Department of Psychiatry (from August 1, 1965).
- MURRAY MELBIN, PH.D., Research Associate in Social Psychology in the Department of Psychiatry.
- NANCY K. MELLO, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- DAVID P. MICHENER, M.D., Research Associate in Psychiatry (from October 1, 1965).
- ARNOLD MILLER, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- NORBETT L. MINTZ, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- ROBERT C. MISCH, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- JAMES J. MULLER, M.A., Research Associate in Psychology in the Department of Psychiatry.
- PETER NATHAN, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- CHARLOTTE E. OWENS, M.P.H., Research Associate in Community Mental Health in the Department of Psychiatry.
- COLIN M. PARKES, M.D., Research Associate in Psychiatry (from September 1, 1965).
- HILDA D. PERLITSH, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- DANIEL PERSHONOK, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- JOSEPH C. RHEINGOLD, M.D., PH.D., Research Associate in Psychiatry.
- ASCANIO M. ROSSI, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- WILLIAM J. RYAN, PH.D., Research Associate in Psychology in the Department of Psychiatry.

PSYCHIATRY

- HERBERT C. SCHULBERG, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- RICHARD I. SHADER, M.D., Research Associate in Psychiatry.
- ALAN P. SHELDON, M.B., CH.B., Research Associate in Psychiatry.
- MARVIN SNIDER, PH.D., Research Associate in Psychology in the Department of Psychiatry (from January 1, 1966).
- IRENE PIERCE STIVER, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- NANCY C. WAUGH, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- NANCY E. WAXLER, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- HENRY WECHSLER, PH.D., Research Associate in Psychology in the Department of Psychiatry.
- GERALD ADLER, M.D., Instructor in Psychiatry.
- MORRIS H. ADLER, M.D., Instructor in Psychiatry.
- GEORGE L. ALEXANDER, JR., Instructor in Psychiatry (resigned August 31, 1965).
- HENRY G. ALTMAN, M.D., Instructor in Psychiatry.
- NICHOLAS C. AVERY, M.D., Instructor in Psychiatry.
- MARY D. BAIN, M.D., Instructor in Psychiatry.
- TULLY BENARON, M.D., Instructor in Psychiatry.
- MARTIN A. BEREZIN, M.D., Instructor in Psychiatry.
- NORMAN R. BERNSTEIN, M.D., Instructor in Psychiatry.
- WILLIAM F. BEUSCHER, M.D., Instructor in Psychiatry.
- WILLIAM A. BINSTOCK, M.D., Instructor in Psychiatry.
- DAVID BLAU, M.D., Instructor in Psychiatry (from September 1, 1965).
- JOHN R. BLITZER, M.D., Instructor in Psychiatry.
- FRANCES J. BONNER, M.D., Instructor in Psychiatry.
- ROBERT L. BRAGG, M.D., M.P.H., Instructor in Psychiatry.
- BENJAMIN B. BRUSSEL, M.D., Instructor in Psychiatry.
- ARTHUR J. CAIN, M.D., Instructor in Psychiatry.
- LLOYD M. CAPLAN, M.D., Instructor in Psychiatry.
- WILLIAM G. CARMICHAEL, M.D., Instructor in Psychiatry.
- JACOB CHRIST, M.D., Instructor in Psychiatry.

HARVARD MEDICAL SCHOOL

JOHN G. CLARK, JR., M.D., Instructor in Psychiatry.
HERBERT S. CLINE, M.D., Instructor in Psychiatry.
RAQUEL E. COHEN, M.P.H., M.D., Instructor in Psychiatry.
ROY M. COLEMAN, M.D., Instructor in Psychiatry.
JAY L. COLLINS, M.D., Instructor in Psychiatry.
JOHN COIT COOLIDGE, M.D., Instructor in Psychiatry.
RICHARD E. CUTLER, M.D., Instructor in Psychiatry.
CHESTER C. d'AUTREMONT, M.D., Instructor in Psychiatry.
EDWIN M. DAVIDSON, M.D., Instructor in Psychiatry.
GERALD E. DAVIDSON, M.D., Instructor in Psychiatry.
DANIEL C. DAWES, M.D., Instructor in Psychiatry.
MAX DAY, M.D., Instructor in Psychiatry.
FRANCIS L. A. DE MARNEFFE, M.B., B.S., Instructor in Psychiatry.
PAUL R. DINSMORE, M.D., Instructor in Psychiatry.
FREDERICK J. DUHL, M.D., Instructor in Psychiatry.
ROBERT M. EISENDRATH, JR., M.D., Instructor in Psychiatry.
RALPH P. ENGLE, JR., M.D., Instructor in Psychiatry.
HENRY C. EVERETT, M.D., Instructor in Psychiatry.
ABRAHAM D. FINEMAN, M.D., Instructor in Psychiatry.
ABRAHAM L. FINESINGER, PH.D., M.D., Instructor in Psychiatry.
THOMAS FRANK, M.D., Instructor in Psychiatry.
FREDDY H. FRANKEL, M.B., CH.B., Instructor in Psychiatry.
DONALD S. GAIR, M.D., Instructor in Psychiatry.
RICHARD GALDSTON, M.D., Instructor in Psychiatry.
PHILLIP H. GATES, M.D., Instructor in Psychiatry.
GEORGE E. GIFFORD, JR., M.D., Instructor in Psychiatry.
BENJAMIN F. GILL, M.D., Instructor in Psychiatry.
HERBERT J. GOLDINGS, M.D., Instructor in Psychiatry.
GERTRUDE R. GREENBLATT, M.D., Instructor in Psychiatry.
THOMAS P. HACKETT, M.D., Instructor in Psychiatry.
JAMES A. HAYCOX, M.D., Instructor in Psychiatry.
HELEN M. HERZAN, M.D., Instructor in Psychiatry.
RICHMOND HOLDER, M.D., Instructor in Psychiatry.
CARLOS L. HUDSON, M.D., Instructor in Psychiatry.
ROBERT W. HYDE, M.D., Instructor in Psychiatry.
PHILLIP L. ISENBERG, M.D., Instructor in Psychiatry.

PSYCHIATRY

- PETER B. JENNEY, M.D., Instructor in Psychiatry.
ERIC R. KANDEL, M.D., Instructor in Psychiatry (resigned December 31, 1965).
SAMUEL KAPLAN, M.D., Instructor in Psychiatry.
IRVING KAUFMAN, M.D., Instructor in Psychiatry.
MELVIN M. KAYCE, M.D., Instructor in Psychiatry.
ARTHUR R. KRAVITZ, M.D., Instructor in Psychiatry.
EDMUND N. KUDARAUSKAS, M.D., Instructor in Psychiatry.
JOHN H. LAMONT, M.D., Instructor in Psychiatry.
GEORGE B. LAWSON, M.D., Instructor in Psychiatry.
BERNARD LEVINE, Ph.D., Instructor in Psychology in the Department of Psychiatry (resigned September 17, 1965).
DON R. LIPSITT, M.D., Instructor in Psychiatry.
MARIA LORENZ, M.D., Instructor in Psychiatry.
WALTER MANN, Ph.D., M.D., Instructor in Psychiatry.
WILLIAM F. McLAUGHLIN, M.D., C.M., Instructor in Psychiatry.
ELINOR MEISS, M.D., Instructor in Psychiatry.
EDWARD MESSNER, M.D., Instructor in Psychiatry.
HALIM MITRY, M.B., Ch.B., Instructor in Psychiatry.
SAMUEL L. MOGUL, M.D., Instructor in Psychiatry.
THOMAS A. MORRIS, Jr., M.D., Instructor in Psychiatry.
BARBARA C. G. MUELLER, M.D., Instructor in Psychiatry.
EGBERT H. MUELLER, M.D., Instructor in Psychiatry.
MALKAH T. NOTMAN, M.D., Instructor in Psychiatry.
SILVIO J. ONESTI, Jr., M.D., C.M., Instructor in Psychiatry.
VERNON D. PATCH, M.D., Instructor in Psychiatry.
EDMUND C. PAYNE, Jr., M.D., Instructor in Psychiatry.
RICHARD R. PEEBLES, Ph.D., Instructor in Psychology in the Department of Psychiatry.
JALNA A. PERRY, M.D., Instructor in Psychiatry.
MAXWELL G. POTTER, M.D., Instructor in Psychiatry.
PETER REICH, M.D., Instructor in Psychiatry.
JOHN FRANCIS REICHARD, M.D., Instructor in Psychiatry.
DAVID E. REISER, M.D., Instructor in Psychiatry.
GEORGE W. REVER, M.D., Instructor in Psychiatry.

HARVARD MEDICAL SCHOOL

- MICHAEL D. ROBBINS, M.D., Instructor in Psychiatry (from September 1, 1965).
- PHELPS M. ROBINSON, M.D., Instructor in Psychiatry.
- JACQUELINE L. ROSEN, PH.D., Instructor in Psychology in the Department of Psychiatry (resigned July 31, 1965).
- MATHEW ROSS, M.D., Instructor in Psychiatry.
- DONALD H. RUSSELL, M.D., Instructor in Psychiatry.
- JOSEPH C. SABBATH, M.D., C.M., Instructor in Psychiatry.
- ROBERT D. SCHNITZER, PH.D., Instructor in Psychology in the Department of Psychiatry.
- LIONEL A. SCHWARTZ, M.D., Instructor in Psychiatry.
- JOAE G. SELZER, M.D., Instructor in Psychiatry.
- RALPH G. SEMON, PH.D., Instructor in Psychology in the Department of Psychiatry.
- ADELE S. SHAMBAUGH, M.D., Instructor in Psychiatry.
- BENJAMIN SHAMBAUGH, M.D., Instructor in Psychiatry.
- JUDITH G. SINGER, PH.D., Instructor in Psychology in the Department of Psychiatry.
- BENSON R. SNYDER, M.D., Instructor in Psychiatry.
- HAROLD D. STALVEY, M.D., Instructor in Psychiatry.
- MALVINA STOCK, M.D., Instructor in Psychiatry.
- WILLIAM E. STONE, M.D., Instructor in Psychiatry.
- JOHN B. STURROCK, M.B., B.S., Instructor in Psychiatry.
- HELEN H. TARTAKOFF, M.D., Instructor in Psychiatry.
- SUZANNE T. VAN AMERONGEN, M.D., Instructor in Psychiatry.
- MAURICE VANDERPOL, M.D., Instructor in Psychiatry.
- MARK M. WALTER, JR., M.D., M.P.H., Instructor in Psychiatry.
- STANLEY WALZER, M.D., Instructor in Psychiatry.
- STEPHEN L. WASHBURN, M.D., Instructor in Psychiatry.
- PAUL L. WATSON, M.D., Instructor in Psychiatry.
- JEROME L. WEINBERGER, M.D., Instructor in Psychiatry.
- LEONARD WEINER, M.D., Instructor in Psychiatry.
- LIONELLE D. WELLS, M.D., Instructor in Psychiatry.
- OLGA S. WERMER, M.D., Instructor in Psychiatry.
- HAROLD W. WILLIAMS, JR., Instructor in Psychiatry.
- RICHARD V. WILSON, M.D., Instructor in Psychiatry.

PSYCHIATRY

HOWARD E. WULSIN, M.D., Instructor in Psychiatry.
BARBARA L. AESCHLIMAN, M.D., Assistant in Psychiatry.
A. SCOTT ANDERSON, JR., M.D., Assistant in Psychiatry.
WILLIAM S. APPLETON, M.D., Assistant in Psychiatry.
WILLIAM J. BARNUM, JR., M.D., Assistant in Psychiatry.
ERNEST W. BERGEL, M.D., Assistant in Psychiatry.
JANE M. BERMAN, M.D., Assistant in Psychiatry.
RUTH B. BEUSCHER, M.D., Assistant in Psychiatry.
GRAHAM B. BLAINE, JR., M.D., Assistant in Psychiatry.
LENORE A. BOLING, M.D., Assistant in Psychiatry.
ANNA C. BROWN, M.D., Assistant in Psychiatry.
DAN H. BUIE, JR., M.D., Assistant in Psychiatry.
DEXTER M. BULLARD, JR., M.D., Assistant in Psychiatry.
BERNARD L. BUSFIELD, JR., M.D., Assistant in Psychiatry.
FRANKLIN CARTER, M.D., Assistant in Psychiatry.
GEORGE CHALPIN, M.D., Assistant in Psychiatry.
MIGNON C. CHASEN, M.D., Assistant in Psychiatry.
GEORGE CLOUTIER, M.D., Assistant in Psychiatry.
HOWARD A. CORWIN, M.D., Assistant in Psychiatry.
JEANNETTE H. CORWIN, M.D., Assistant in Psychiatry.
WILLIAM M. CROWELL, M.D., Assistant in Psychiatry.
HADASSAH S. DANIELS, M.D., Assistant in Psychiatry.
DAN A. DITMORE, M.D., Assistant in Psychiatry.
JOEL H. FEIGON, M.D., Assistant in Psychiatry.
ALBERT H. FEINGOLD, M.D., Assistant in Psychiatry.
DONALD J. FERN, M.D., Assistant in Psychiatry.
BRUCE W. FISCHBERG, M.D., Assistant in Psychiatry.
ALICE M. FLEMING, M.D., Assistant in Psychiatry.
LEONARD J. FRIEDMAN, M.D., Assistant in Psychiatry.
MAX GELLER, M.D., Assistant in Psychiatry.
JOSEPH F. GREANEY, M.D., Assistant in Psychiatry.
JACK GREEN, M.D., C.M., Assistant in Psychiatry.
NICHOLAS A. GREEN, M.D., Assistant in Psychiatry.
PETER B. HAGOPIAN, M.D., Assistant in Psychiatry.
WALLACE F. HALEY, JR., M.D., Assistant in Psychiatry.
DORR F. HALLENBECK, JR., M.D., Assistant in Psychiatry.

HARVARD MEDICAL SCHOOL

- HERBERT I. HARRIS, M.D., Assistant in Psychiatry.
FRANCIS C. HERSEY, M.D., Assistant in Psychiatry.
JOHN A. HOBSON, M.D., Assistant in Psychiatry.
PIERRE JOHANNET, M.D., Assistant in Psychiatry.
EDA M. KAHANA, M.D., Assistant in Psychiatry.
ALVIN KAHN, M.D., Assistant in Psychiatry.
ERNEST KAHN, M.D., Assistant in Psychiatry.
JUDY L. KANTROWITZ, PH.D., Assistant in Psychology in the Department of Psychiatry (from October 15, 1965).
ROBERT L. KELLEY, M.D., Assistant in Psychiatry.
SUSAN T. KLEEMAN, M.D., Assistant in Psychiatry.
WILLIAM KORNFELD, M.D., Assistant in Psychiatry.
ALFRED J. R. KOUMANS, M.D., Assistant in Psychiatry.
MARVIN B. KRIMS, M.D., Assistant in Psychiatry.
KATHRYN B. KRIS, M.D., Assistant in Psychiatry (from July 15, 1965).
ELIOT LANDSMAN, M.D., Assistant in Psychiatry.
PHILIP LAZAROFF, M.D., Assistant in Psychiatry.
CAVIN P. LEEMAN, M.D., Assistant in Psychiatry.
HERBERT O. LEVINE, M.D., Assistant in Psychiatry.
THEODORE LINDAUER, M.D., Assistant in Psychiatry (from September 1, 1965).
JOHN T. MALTSBERGER, 3RD, M.D., Assistant in Psychiatry.
WILLIAM F. MCCOURT, M.D., Assistant in Psychiatry.
MICHAEL T. MCGUIRE, M.D., Assistant in Psychiatry.
ARTHUR W. MCMAHON, M.D., Assistant in Psychiatry.
ROBERT D. MEHLMAN, M.D., Assistant in Psychiatry.
JOHN F. MERRIFIELD, M.D., Assistant in Psychiatry.
JAMES J. MULLEN, M.D., Assistant in Psychiatry.
RUTH S. MUNRO, PH.D., Assistant in Psychology in the Department of Psychiatry (resigned December 3, 1965).
ARTHUR Z. MUTTER, M.D., Assistant in Psychiatry.
ARMAND M. NICHOLI, JR., M.D., Assistant in Psychiatry.
NANCY P. NICHOLS, M.D., Assistant in Psychiatry.
HARRY S. OLIN, M.D., Assistant in Psychiatry.
DONALD OTTENSTEIN, M.D., Assistant in Psychiatry.

PSYCHIATRY

- ALAN D. PERSKY, M.D., Assistant in Psychiatry.
EUGENE U. PIAZZA, M.D., Assistant in Psychiatry.
ALAN PRAGER, M.D., Assistant in Psychiatry.
JACK O. RICE, M.D., Assistant in Psychiatry.
NANCY ROLLINS, M.D., Assistant in Psychiatry.
THEODORE SACK, M.D., Assistant in Psychiatry.
LAWRENCE C. SALVESEN, M.D., Assistant in Psychiatry.
PAUL E. SAPIR, M.D., Assistant in Psychiatry.
WILLIAM SHARPE, JR., M.D., Assistant in Psychiatry.
THEODORE C. SHEFTEL, M.D., Assistant in Psychiatry.
WILLIAM R. SHELTON, M.D., Assistant in Psychiatry.
NATHAN T. SIDLEY, M.D., Assistant in Psychiatry.
JULIUS SILBERGER, JR., M.D., Assistant in Psychiatry.
RICHARD H. SMITH, M.D., Assistant in Psychiatry.
STEWART R. SMITH, M.D., Assistant in Psychiatry.
SUMNER STONE, M.D., Assistant in Psychiatry.
WILLIAM D. TEMBY, M.D., Assistant in Psychiatry.
DAVID VAN BUSKIRK, M.D., Assistant in Psychiatry.
RAFIQ WAZIRI, M.D., Assistant in Psychiatry (resigned December 31, 1965).
JOHN L. WEIL, M.D., Assistant in Psychiatry.
ROBERT M. WEINER, M.D., Assistant in Psychiatry.
FREDERICK E. WHISKIN, M.D., Assistant in Psychiatry.
LEE H. WILLER, M.D., Assistant in Psychiatry.
ANNA K. WOLFF, M.D., Assistant in Psychiatry.
HAROLD M. WOLMAN, M.D., Assistant in Psychiatry.
EDWARD L. ZARSKY, M.D., Assistant in Psychiatry.
JOAN J. ZILBACH, M.D., Assistant in Psychiatry.
LAWRENCE M. ABRAHAMS, M.D., Research Fellow in Psychiatry.
STEWART L. ALEDORT, M.D., Research Fellow in Psychiatry.
JANE E. BAIN, M.D., Research Fellow in Psychiatry.
SAMUEL H. BARONDES, M.D., Research Fellow in Psychiatry.
ALAN F. BLUM, PH.D., Research Fellow in Psychology in the Department of Psychiatry (appointment expired September 30, 1965).
CLIFFORD S. BRIGGIN, M.D., Research Fellow in Psychiatry.

HARVARD MEDICAL SCHOOL

CHARLES E. BROWN, M.D., Research Fellow in Psychiatry.

PETER BRYAN-BROWN, M.B., CH.B., Research Fellow in Psychiatry.

HARVEY M. BUDNER, M.D., Research Fellow in Psychiatry.

RICHARD D. BUDSON, M.D., Research Fellow in Psychiatry.

THOMAS A. BULL, M.D., Research Fellow in Psychiatry.

CORBETT CAMPBELL, M.B., CH.B., Research Fellow in Psychiatry.

THOMAS L. CHIU, M.D., Research Fellow in Psychiatry.

ROBERT A. COLE, M.D., Research Fellow in Psychiatry.

JERRY J. I. COOPER, M.D., Research Fellow in Psychiatry.

ANDREW B. CRIDER, PH.D., Research Fellow in Psychology in the
Department of Psychiatry (appointment expired January
31, 1966).

ROBERT CSERR, M.D., Research Fellow in Psychiatry.

WOODROW M. DONOVAN, M.D., Research Fellow in Psychiatry.

IRENE F. FINSTEIN, M.D., Research Fellow in Psychiatry.

DANIEL B. FISHMAN, PH.D., Research Fellow in Psychology in
the Department of Psychiatry.

CORNELIA W. M. FRIEDMAN, M.D., Research Fellow in Psychiatry.

PETER J. GOTTWALD, M.D., Research Fellow in Psychiatry.

SIDNEY GREEN, M.D., Research Fellow in Psychiatry.

FRANK HAENDEL, M.D., Research Fellow in Psychiatry.

DUANE Q. HAGEN, M.D., Research Fellow in Psychiatry.

BRUNO HANHART, M.D., Research Fellow in Psychiatry (died
November 24, 1965).

EDDIE H. HARRIS, M.D., Research Fellow in Psychiatry.

CHESTER W. HARTMAN, PH.D., Research Fellow in Sociology in
the Department of Psychiatry.

LAWRENCE M. HARTMANN, M.D., Research Fellow in Psychiatry.

ROBERT P. HOPKINS, M.D., Research Fellow in Psychiatry.

JUDITH N. HUIZENGA, M.D., Research Fellow in Psychiatry.

GARY JACOBSON, M.D., Research Fellow in Psychiatry.

MASAYA JIMBO, M.D., Research Fellow in Psychiatry.

MARGARET A. JOLLY, M.D., Research Fellow in Psychiatry.

ALEXANDRA M. KAIL, M.D., C.M., Research Fellow in Psychiatry.

DUBRAVKO M. KUFTINEC, M.D., Research Fellow in Psychiatry.

PSYCHIATRY

- IRVING KUPFERMANN, PH.D., Research Fellow in Psychology in the Department of Psychiatry (resigned December 31, 1965).
- ROBERT LEFF, M.D., Research Fellow in Psychiatry.
- MIGUEL A. LEIBOVICH, M.D., Research Fellow in Psychiatry.
- JOAN A. LEVIN, PH.D., Research Fellow in Sociology in the Department of Psychiatry
- JOHN B. LIVINGSTONE, M.D., Research Fellow in Psychiatry.
- STEPHEN LORCH, S.B., Research Fellow in Biomathematics in the Department of Psychiatry.
- LEE B. MACHT, M.D., Research Fellow in Psychiatry.
- PETER R. MANES, M.D., Research Fellow in Psychiatry.
- MARY A. MATHEWS, M.D., Research Fellow in Psychiatry.
- ROBERT W. MCCARLEY, M.D., Research Fellow in Psychiatry.
- DENNIS J. MCCRORY, M.D., Research Fellow in Psychiatry.
- NANCY JEAN McDONNELL, M.D., Research Fellow in Psychiatry (from October 15, 1965).
- JOANNE D. MEDALIE, Ed.D., Research Fellow in Psychology in the Department of Psychiatry.
- MURIEL E. MOLDAWER, M.D., Research Fellow in Psychiatry.
- CAROL C. NADELSON, M.D., Research Fellow in Psychiatry.
- THEODORE NADELSON, M.D., Research Fellow in Psychiatry.
- MOTOI OGATA, M.D., Research Fellow in Psychiatry (from September 15, 1965).
- JANE B. OLDDEN, M.D., Research Fellow in Psychiatry.
- CHESTER A. PEARLMAN, M.D., Research Fellow in Psychiatry.
- PETER P. REILLY, JR., M.D., Research Fellow in Psychiatry.
- LARRY ROSENBERG, PH.D., Research Fellow in Psychology in the Department of Psychiatry (appointment expired August 31, 1965).
- YOSHIO SAKAMOTO, M.D., Research Fellow in Psychiatry (from September 1, 1965).
- SIRGAY SANGER, M.D., Research Fellow in Psychiatry.
- DAVID G. SATIN, M.D., Research Fellow in Psychiatry.
- BERNARDO S. SCHEIMBERG, M.D., Research Fellow in Psychiatry.
- PHILIP W. SHAMBAUGH, M.D., Research Fellow in Psychiatry.
- ROBERT W. SHAPIRO, M.D., Research Fellow in Psychiatry.

HARVARD MEDICAL SCHOOL

- HARVEY M. SHEIN, M.D., Research Fellow in Psychiatry.
LAWRENCE A. STONE, M.D., Research Fellow in Psychiatry.
LARRY H. STRASBERGER, M.D., Research Fellow in Psychiatry.
LUDWIK S. SZYMANSKI, M.D., Teaching Fellow in Psychiatry.
MICHAEL J. WALKER, M.D., Research Fellow in Psychiatry.
KAZUO YAMAMOTO, Ph.D., Research Fellow in Psychology in the
Department of Psychiatry (from December 1, 1965).
JEFFRY J. ANDRESEN, M.D., Teaching Fellow in Psychiatry.
JAMES C. BECK, Ph.D., M.D., Teaching Fellow in Psychiatry.
MICHAEL J. BENNETT, M.D., Teaching Fellow in Psychiatry.
CARL L. BIRK, M.D., Teaching Fellow in Psychiatry.
HERBERT S. BLOCH, M.D., Teaching Fellow in Psychiatry.
JOSEPH D. BLOOM, M.D., Teaching Fellow in Psychiatry.
ROBERT A. BLUM, M.D., Teaching Fellow in Psychiatry.
LESLIE BROOKS, M.D., Teaching Fellow in Psychiatry.
PAUL A. BUTTENWIESER, M.D., Teaching Fellow in Psychiatry.
CHARLES W. CARL, JR., M.D., Teaching Fellow in Psychiatry.
CHING-PIAO CHIEN, M.D., Teaching Fellow in Psychiatry.
MAURICE C. CION, M.D., Teaching Fellow in Psychiatry.
JAMES S. DALSIMER, M.D., Teaching Fellow in Psychiatry.
ALFRED E. DARBY, JR., M.D., Teaching Fellow in Psychiatry.
MARIANNE DIERKS, M.D., Teaching Fellow in Psychiatry.
THEODORE DREIER, JR., M.D., Teaching Fellow in Psychiatry
(from September 1, 1965).
ROBERT L. DUPONT, M.D., Teaching Fellow in Psychiatry.
ANTHONY E. ELITE, M.D., Teaching Fellow in Psychiatry.
HIKMET N. EMMANUEL, M.B., Ch.B., Teaching Fellow in Psychiatry.
JOSEPH L. FINESINGER, M.D., Teaching Fellow in Psychiatry.
SUSAN M. FISHER, M.D., Teaching Fellow in Psychiatry.
ROY G. FITZGERALD, M.D., Teaching Fellow in Psychiatry.
DAVID H. FRAM, M.D., Teaching Fellow in Psychiatry.
WESLEY T. FRAZIER, M.D., Teaching Fellow in Psychiatry (re-
signed January 31, 1966).
HENRY FRIEDMAN, M.D., Teaching Fellow in Psychiatry.
FRANCIS P. GALLAGHER, M.D., Teaching Fellow in Psychiatry.

PSYCHIATRY

- WILLIAM B. GAULT, M.D., Teaching Fellow in Psychiatry.
RICARDO A. GIRON, M.D., Teaching Fellow in Psychiatry.
PETER E. GOLDFINE, M.D., Teaching Fellow in Psychiatry.
JON E. GUDEMAN, M.D., Teaching Fellow in Psychiatry.
GRAEME HANSON, M.D., Teaching Fellow in Psychiatry.
DAVID W. HAVENS, M.D., Teaching Fellow in Psychiatry.
AXEL HOFFER, M.D., Teaching Fellow in Psychiatry.
STEPHEN D. HOWARD, M.D., Teaching Fellow in Psychiatry.
MICHAEL C. HUGHES, M.D., Teaching Fellow in Psychiatry (from September 1, 1965).
RONALD O. HURSTON, M.D., Teaching Fellow in Psychiatry.
LLOYD P. KAMINS, M.D., Teaching Fellow in Psychiatry.
WILLIAM W. KATES, M.D., Teaching Fellow in Psychiatry.
SHARON L. KAUFMAN, M.D., Teaching Fellow in Psychiatry.
NASIR A. KHAN, M.B., B.S., Teaching Fellow in Psychiatry.
EDWARD J. KHANTZIAN, M.D., Teaching Fellow in Psychiatry.
GEORGE S. KLAVERNS, M.D., Teaching Fellow in Psychiatry.
ROLF A. LEDERER, M.B., CH.B., Teaching Fellow in Psychiatry.
KYU W. LEE, M.D., Teaching Fellow in Psychiatry (from September 1, 1965).
LOUIS D. LEVI, M.D., Teaching Fellow in Psychiatry.
ROBERT T. LEWIT, M.D., Teaching Fellow in Psychiatry.
ROBERT P. LIBERMAN, M.D., Teaching Fellow in Psychiatry.
THEODORE LINDAUER, M.D., Teaching Fellow in Psychiatry (through August 31, 1965).
JEROME J. LISS, M.D., Teaching Fellow in Psychiatry.
LAWRENCE LITMAN, M.D., Teaching Fellow in Psychiatry.
PETER B. LIVINGSTON, M.D., Teaching Fellow in Psychiatry.
HUGH J. LURIE, M.D., Teaching Fellow in Psychiatry.
ALAN N. MARKS, M.D., Teaching Fellow in Psychiatry.
HARVEY E. MAZER, M.D., Teaching Fellow in Psychiatry.
JAMES G. McALLISTER, 3RD, M.D., Teaching Fellow in Psychiatry (from September 1, 1965).
HERBERT Y. MELTZER, M.D., Teaching Fellow in Psychiatry.
MARTIN A. MILLER, M.D., Teaching Fellow in Psychiatry.

HARVARD MEDICAL SCHOOL

SOPHIE B. MINTZ, PH.D., Teaching Fellow in Psychology in the Department of Psychiatry.

ANDREW P. MORRISON, M.D., Teaching Fellow in Psychiatry.

LAWRENCE B. MUTTY, M.D., Teaching Fellow in Psychiatry.

AMOS NAHOR, M.D., Teaching Fellow in Psychiatry.

JEREMY P. NAHUM, M.D., Teaching Fellow in Psychiatry.

WALTER N. PAHNKE, M.D., Teaching Fellow in Psychiatry.

ANITA PAINE, M.D., Teaching Fellow in Psychiatry.

FRANK J. PAOLITTO, M.D., Teaching Fellow in Psychiatry.

ROBERT D. PATTERSON, M.D., Teaching Fellow in Psychiatry.

FREDERIC J. PHILLIPS, M.D., Teaching Fellow in Psychiatry.

GERALD M. POLIN, M.D., Teaching Fellow in Psychiatry (from July 15, 1965).

ROBERT L. PYLES, M.D., Teaching Fellow in Psychiatry.

PETER B. F. RANDOLPH, M.D., Teaching Fellow in Psychiatry.

DAVID REISS, M.D., Teaching Fellow in Psychiatry.

MARK W. RHINE, M.D., Teaching Fellow in Psychiatry.

MARTIN B. RICHMOND, M.D., Teaching Fellow in Psychiatry.

DONALD L. RIFE, M.D., Teaching Fellow in Psychiatry.

EDWARD J. ROLDE, M.D., Teaching Fellow in Psychiatry.

SAUL H. ROSENTHAL, M.D., Teaching Fellow in Psychiatry.

JANE A.V. RUSSELL, M.D., Teaching Fellow in Psychiatry.

PAUL L. RUSSELL, M.D., Teaching Fellow in Psychiatry.

BRIGITTE RUSS-SCHNAPP, M.D., Teaching Fellow in Psychiatry.

JAMES E. SABIN, M.D., Teaching Fellow in Psychiatry.

CARL SALZMAN, M.D., Teaching Fellow in Psychiatry.

ALBERT B. SAMARAWEEERA, M.B., B.S., Teaching Fellow in Psychiatry.

SHERA SAMARAWEEERA, M.B., B.S., D.P.M., Teaching Fellow in Psychiatry (from September 1, 1965).

DORA L. SCALITER, M.D., Teaching Fellow in Psychiatry.

WILLIAM D. STRATHMANN, M.D., Teaching Fellow in Psychiatry.

ALFREDO T. SUESCUM, M.D., Teaching Fellow in Psychiatry.

DAVID D. SWENSON, M.D., Teaching Fellow in Psychiatry (resigned March 15, 1966).

ROBERT H. TRIVUS, M.D., PH.D., Teaching Fellow in Psychiatry.

PSYCHIATRY

THOMAS R. VERNY, M.D., Teaching Fellow in Psychiatry.

JERRY WACKS, M.D., Teaching Fellow in Psychiatry.

NORMAN L. WILSON, JR., M.D., Teaching Fellow in Psychiatry.

RAYMOND C. YERKES, M.D., Teaching Fellow in Psychiatry.

SHELDON D. ZIGELBAUM, D.M.D., M.D., Teaching Fellow in Psychiatry.

JOHN ZINNER, M.D., Teaching Fellow in Psychiatry.

HOWARD V. ZONANA, M.D., Teaching Fellow in Psychiatry.

Required Courses

PSYCHIATRY. *First Year.*—Normal Growth and Development. The course will focus on the biological roots of behavior with particular attention to the phenomena of emotion and learning. Consideration of the progressive adaptation of the organism in interaction with the environment leads to an introduction to human personality development. This theme is developed further in the second year. The clinics will present patients exemplifying topic areas from the lecture series.

PSYCHIATRY. *Second Year.*—The second year consists of nineteen lectures in abnormal growth and development to develop further concepts of psychological functioning. Emphasis shifts to the nature and genesis of abnormal psychological mechanisms manifested in symptoms and behavioral disturbances. Twelve additional hours are given to introduce methods of history taking and examination of patients designed to understand more fully socio-emotional factors in illness. The course is designed to serve as a preparation for the Introduction to the Clinic and the Principal Clinical Year.

PSYCHIATRY. *Introduction to the Clinic.*—Psychiatric interviewing and case-taking are taught on the wards of the Beth Israel Hospital, Boston City Hospital, Massachusetts General Hospital, and Peter Bent Brigham Hospital by their psychiatric staffs. Lecture-demonstrations supplement this preparation for the subsequent clerkship.

PSYCHIATRY. *Principal Clinical Year.*—Each student serves as a clinical clerk for three weeks at the Massachusetts Mental Health

HARVARD MEDICAL SCHOOL

Center, the Massachusetts General Hospital, or the McLean Hospital in conjunction with the Beth Israel Hospital. Work is with inpatients and outpatients, under supervision, and includes both short term and longer term contacts. The psychiatric problems of children and adolescents are discussed with staff members of the M.M.H.C., M.G.H., B.I.H., or C.H.M.C. During the medical, surgical, and pediatric clerkships at the B.I.H., B.C.H., M.G.H., P.B.B.H., and C.H.M.C., additional patients are studied under supervision one period each week. Emphasis is on the psychiatric problems of medical practice.

FIRST YEAR

HOURS

PSYCHIATRY. Lectures and clinics. Drs. NEMIAH, ERVIN, and ASSOCIATES.

12

SECOND YEAR

PSYCHIATRY. Lectures and section teaching. Dr. NEMIAH coordinator for course in Abnormal Growth and Development. In addition to nineteen lectures, each student attends four three-hour exercises as part of the course in physical diagnosis.

19

12

INTRODUCTION TO THE CLINIC

PSYCHIATRY. Psychiatry services in the B.I.H., B.C.H., M.G.H., and P.B.B.H. Number of hours varies.

PRINCIPAL CLINICAL YEAR

PSYCHIATRY. Clinical Clerkship. Drs. EWALT, HAVENS, NEMIAH, VORENBERG, STANTON, GARDNER, FOX, P. SOLOMON, and ASSOCIATES at the M.M.H.C., M.G.H., B.I.H., Mc.L.H., C.H.M.C., P.B.B.H., B.C.H. In addition to the psychiatric clerkship students spend one period each week on psychiatric problems during clerkships in medicine, surgery, and pediatrics.

120

Fourth Year Elective Courses

BLOCK COURSES

- 501M. Adult Psychiatry. Dr. VORENBERG and ASSOCIATES.
502M. Child Psychiatry. Dr. ONESTI and ASSOCIATES.

PSYCHIATRY

- 503M. Medical Psychotherapy. Dr. ALTMAN and ASSOCIATES.
- 504M. Social Sciences in Medicine. Dr. ZINBERG and ASSOCIATES.
- 505M. Adult Psychiatry. Dr. P. SOLOMON and ASSOCIATES.
- 506M. Psychiatric Emergencies. Dr. P. SOLOMON and ASSOCIATES.
- 507M. Psychiatric Problems in Alcoholism. Dr. P. SOLOMON and ASSO-
CIATES.
- 508M. Psychiatry in Medical Practice. Dr. P. SOLOMON and ASSOCIATES.
- 509M. Child Psychiatry. Dr. G. E. GARDNER and ASSOCIATES.
- 510M. Child Psychiatry in Pediatric Practice. Dr. G. E. GARDNER and AS-
SOCIATES.
- 511M. Supervised Field Opportunities in Community Psychiatry. Dr. CAP-
LAN and ASSOCIATES.
- 512M. Inpatient Service. Dr. NEMIAH.
- 513M. Psychiatric Clinic. Dr. SIFNEOS.
- 514M. Child Psychiatry. Dr. LAMONT.
- 515M. Acute Service. Dr. CHAFETZ.
- 516M. Alcohol Clinic. Dr. CHAFETZ.
- 517M. Community Mental Health Program. Dr. BRAGG.
- 518M. Adult Psychiatry. Drs. NEMIAH, SIFNEOS, WEISMAN, and CHAFETZ.
- 519M. Child Psychiatry. Dr. LAMONT.
- 520M. Acute Service. Dr. CHAFETZ.
- 521M. Alcohol Clinic. Dr. CHAFETZ.
- 522M. Adult Psychiatry. Dr. HAVENS and ASSOCIATES.
- 523M. Child Psychiatry. Dr. ROCHLIN and ASSOCIATES.
- 524M. Clinical Psychiatry. Drs. STANTON, HOWARD, LEVIN, WERMER, STONE,
DEMARNEFFE, CHRIST, MUELLER, WASHBURN, and ASSOCIATES.
- 525M. Clinical Psychiatry. Drs. STANTON, HOWARD, LEVIN, WERMER, STONE,
DEMARNEFFE, CHRIST, MUELLER, WASHBURN, and ASSOCIATES.

BLOCK COURSES — RESEARCH

- 801. Clinical Psychiatric Research. Dr. HUNTINGTON.
- 802. General Psychiatric Research. Dr. P. SOLOMON and ASSOCIATES.
- 803. Research in Infant Development. Dr. P. H. WOLFF.
- 804. Experimental Analysis of Behavior and of Drugs Affecting Behavior in
Laboratory Animals. Drs. DEWS, MORSE, and KELLEHER. (*Same course*
as Pharmacology 814.)
- 805. Systematic Analysis of Psychotherapy. Drs. STANTON, KAHNE, SCHNIT-
ZER, VANDERPOL, and COLEMAN.
- 806. Analysis of the Transmission of Signals through Ganglia of Simple
Nervous Systems (Statistical Communication and Systems Theory Ap-
proach). Dr. HERMANN.
- 807. Ward Interaction of Schizophrenic Patients. Dr. ELDRED and ASSO-
CIATES.
- 808. Clinical Research — Inpatient Service. Dr. NEMIAH.
- 809. Clinical Research — Outpatient Service. Dr. SIFNEOS.
- 810. Clinical Research — Consultation Service. Dr. WEISMAN.
- 811. Clinical Research — Acute Service. Dr. CHAFETZ.
- 812. Clinical Research — Alcohol Clinic. Dr. CHAFETZ.

HARVARD MEDICAL SCHOOL

- 813. Clinical Research—Child Psychiatry. Dr. LAMONT.
- 814. Laboratory Work in Psychiatry. Drs. ERVIN, MENDELSON, TALLAND, MELLO, WAUGH, QUARTON, and Mr. LORCH.
- 816. Clinical Psychiatric Research. Dr. Fox and ASSOCIATES.

Elective Courses

Laboratory of Community Psychiatry

- 1a. Research Methodology. Drs. K. JONES, SCHULBERG, and WEISS.
- 1b. Research Project Paper. Drs. K. JONES, SCHULBERG, and WEISS.
- 2a. Fundamentals of Administration and Planning. Mr. DEMONE and Dr. HOWE.
- 2b. Administration of Community Mental Health Programs. Dr. CAPLAN.
- 3a. Community Dynamics Seminar. Mr. DEMONE and Mrs. WRIGHT.
- 3b. Community Dynamics Supervision. Mr. DEMONE, Dr. HOWE, and Mrs. WRIGHT.
- 4. Contributions of Social Science to Community Mental Health. Dr. McEWAN.
- 5. Group Process. Dr. A. P. SHELDON.
- 7. Legal Aspects of Community Mental Health. Mr. BERLIN.
- 8. Visual Communication in Professional Education. Dr. MASON.
- 10. Principles of Preventive Psychiatry. Dr. CAPLAN.

LONGITUDINAL COURSES

- 701. Use of Psychological Tests in General Hospital Practice. Drs. HUNTINGTON and B. LEVINE.
- 702. Legal Aspects of Community Mental Health. Mr. BERLIN.
- 703. Administration of Community Mental Health Programs. Dr. CAPLAN.
- 704. Community Dynamics. Mr. DEMONE and Mrs. WRIGHT.
- 707. Group Processes. Drs. ZINBERG, CHRIST, and ASSOCIATES.
- 708. Individual Psychotherapy. Dr. HAYCOX and ASSOCIATES.
- 709. General Psychopathology. Dr. STONE and ASSOCIATES.
- 710. Applied Geriatric Psychiatry. Dr. BEREZIN and ASSOCIATES.
- 711. Behavioral Science Research. Dr. TALLAND and ASSOCIATES.
- 712. Outpatient Psychotherapy. Dr. SIFNEOS.
- 713. Pre-school Check-up Program. Dr. MISCH.
- 714. Techniques of Preventive Intervention. Dr. HERZAN.
- 715. Dynamics of Group Processes in Medical Practice. Dr. SEMRAD and ASSOCIATES.
- 716. Basic Principles of Psychotherapy. Dr. SEMRAD.
- 717. Readings in Psychiatry. Dr. HAVENS.
- 718. Basic Concepts of Dynamic Psychiatry. Dr. E. R. ZETZEL.
- 719. Selected Topics in Social Psychiatry. Drs. LEVINSON and MISHLER.
- 721. Uses of Physiological Measurements in Psychological Research. Drs. SHAPIRO, CRIDER, and Mr. TURSKY.
- 722. Outpatient Therapy. Dr. CHRIST.

RADIOLOGY

DEPARTMENT OF RADIOLOGY

HENRY I. KOHN, PH.D., M.D., Alvan T. and Viola D. Fuller-American Cancer Society Professor of Radiology.

EDWARD B. D. NEUHAUSER, M.D., Clinical Professor of Radiology and Head of the Department.

LAURENCE L. ROBBINS, M.D., Clinical Professor of Radiology.

JAMES B. DEALY, JR., M.D., Associate Clinical Professor of Radiology.

RICHARD SCHATZKI, M.D., Associate Clinical Professor of Radiology.

MILFORD D. SCHULZ, M.D., Associate Clinical Professor of Radiology.

MORRIS SIMON, M.B., CH.B., Associate Clinical Professor in Radiology.

MARTIN H. WITTENBORG, M.D., Associate Clinical Professor of Radiology.

STANLEY J. ADELSTEIN, M.D., Philip H. Cook Fellow in Radiology, and Assistant Professor of Anatomy.

MARJORIE J. LEMAY, M.D., Assistant Clinical Professor of Radiology.

MAJIC S. POTSAID, M.D., Assistant Clinical Professor of Radiology.

EDWARD W. WEBSTER, PH.D., Assistant Professor of Physics in the Department of Radiology.

STANLEY M. WYMAN, M.D., Assistant Clinical Professor of Radiology.

JACK R. DREYFUSS, M.D., Clinical Associate in Radiology.

JOHN E. GARY, M.D., Clinical Associate in Radiology.

JOSEPH H. MARKS, M.D., Clinical Associate in Radiology.

CHIU-CHEN WANG, M.D., Clinical Associate in Radiology.

HASSAN K. AWWAD, M.B., CH.B., Lecturer on Radiology (resigned January 9, 1966).

MARTIN B. LEVENE, M.D., Lecturer on Radiology.

HARVARD MEDICAL SCHOOL

- JEROME H. SHAPIRO, M.D., Lecturer on Radiology.
LUCY F. SQUIRE, M.D., Lecturer on Radiology.
TUGRUL PIRNAR, M.D., Research Associate in Radiology.
BORIS P. BUSHUEFF, M.D., Instructor in Radiology.
ROBERT E. DINSMORE, M.D., Instructor in Radiology.
GEORGE B. C. HARRIS, M.D., Instructor in Radiology.
MURRAY L. JANOWER, M.D., Instructor in Radiology.
MIRLE A. KELLETT, M.D., Instructor in Radiology.
JOHN P. LAVENDER, M.B., CH.B., Instructor in Radiology.
ALEXANDER S. MACMILLAN, JR., M.D., Instructor in Radiology.
JAMES M. MCNEILL, M.D., Instructor in Radiology.
PAUL F. J. NEW, M.B., B.S., Instructor in Radiology.
HENRY P. PENDERGRASS, M.D., Instructor in Radiology.
JAMES J. POLLARD, M.D., Instructor in Radiology.
KEITH R. RABINOV, M.D., Instructor in Radiology.
NORMAN L. SADOWSKY, M.D., Instructor in Radiology.
JOHN L. SOSMAN, M.D., Instructor in Radiology.
FREDERICK S. TOMCHIK, M.D., Instructor in Radiology.
ALFRED L. WEBER, M.D., Instructor in Radiology.
WALTHER T. WEYLMAN, M.D., Instructor in Radiology (resigned
September 30, 1965).
HARRY BAILEY, M.B., CH.B., Assistant in Radiology.
STANLEY P. BOHRER, M.D., Assistant in Radiology (from October
1, 1965).
DUNCAN N. DICKSON, M.D., Assistant in Radiology.
HARVEY I. FINKELSTEIN, M.D., Assistant in Radiology.
JULIAN I. GILLIAM, M.D., Assistant in Radiology.
DEREK J. GOODMAN, M.B., B.S., Assistant in Radiology (from
January 1, 1966).
NATHAN T. GRISCOM, M.D., Assistant in Radiology.
LLOYD E. HAWES, M.D., Assistant in Radiology.
DANIEL KAPLAN, M.D., Assistant in Radiology.
EDWARD J. KELLY, M.D., Assistant in Radiology.
RONALD J. MESSER, M.D., Assistant in Radiology (from August
15, 1965).
ROBERT A. NEBESAR, M.D., Assistant in Radiology.

RADIOLOGY

RICHARD G. O'BRIEN, M.D., Assistant in Radiology.

JOHN F. O'CONNOR, M.D., Assistant in Radiology.

WILLARD PERRY, JR., M.D., Assistant in Radiology (resigned September 30, 1965).

EDWARD J. POTCHEN, M.D., Assistant in Radiology.

JAMES A. ROURKE, M.D., Assistant in Radiology.

STEFAN C. SCHATZKI, M.D., Assistant in Radiology.

HUBERT S. SEAR, M.D., Assistant in Radiology.

MELVIN TEFFT, M.D., Assistant in Radiology.

ROLAND G. WARE, M.D., Assistant in Radiology.

HERBERT D. WEINTRAUB, M.D., Assistant in Radiology.

NAIM KAN'AN-ATALLAH, M.D., Teaching Fellow in Radiology (from January 1, 1966).

CHARLES A. GOODING, M.D., Teaching Fellow in Radiology (appointment expired December 31, 1965).

DEREK J. GOODMAN, M.B., CH.B., Teaching Fellow in Radiology (through December 31, 1965).

RODOLPHE E. LANGEVIN, M.D., Teaching Fellow in Radiology.

Required Courses

RADIOLOGY. *First Year.*—Radiological instruction during the first year comprises a series of lectures and demonstrations, during the course in Anatomy, designed to introduce and apply the X-ray method as a means of studying gross internal anatomy in health and disease. The practical application of these methods is extended in the Saturday clinics.

RADIOLOGY. *Second Year.*—During the second semester of the second year, small group exercises and demonstrations are conducted in conjunction with the program of correlative teaching, with emphasis on the systematic approach to X-ray interpretation and the correlation of abnormal findings with gross pathology and pathophysiology.

RADIOLOGY. *Introduction to the Clinic and Principal Clinical Year.*—Instruction is offered at the teaching hospitals through a series of lectures, clinics, and seminars.

HARVARD MEDICAL SCHOOL

Fourth Year Elective Courses

BLOCK COURSES

- 501M. General Radiology. Dr. SIMON and ASSOCIATES.
- 502M. Diagnostic Roentgenology. Dr. SIMON and ASSOCIATES.
- 503M. General Pediatric Roentgen Diagnosis. Dr. NEUHAUSER and ASSOCIATES.
- 504M. Pediatric Radiotherapy. Dr. TEFFT.
- 505M. General Radiology. Dr. ROBBINS and ASSOCIATES.
- 506M. Radiation Therapy. Dr. SCHULZ and ASSOCIATES.
- 507M. General Radiology with Stress on Diagnostic Radiology. Dr. R. SCHATZKI and ASSOCIATES.
- 508M. Clinical Diagnosis, Clinical Radiotherapy, and Nuclear Medicine. Dr. DEALY and ASSOCIATES.
- 509M. Clinical Diagnosis. Dr. DEALY and ASSOCIATES.
- 510M. Clinical Radiotherapy, including Tutorial Instruction in Radiobiology. Drs. DEALY, ADELSTEIN, and ASSOCIATES.
- 511M. Nuclear Medicine. Drs. DEALY, POTCHEN, and ASSOCIATES.
- 512M. General Radiology. Dr. BUSHUEFF and ASSOCIATES.
- 513M. Radiology. Dr. SHAPIRO and ASSOCIATES.

LONGITUDINAL COURSES

- 701. Oncologic Radiobiology. Drs. KOHN, ADELSTEIN, and ASSOCIATES.
- 702. Diagnostic Roentgenology. Dr. ROBBINS.

SURGERY

DEPARTMENT OF SURGERY

JACOB FINE, M.D., Professor of Surgery at the Beth Israel Hospital, and Head of the Department at the Beth Israel Hospital.

ROBERT E. GROSS, M.D., D.Sc. (hon.), William E. Ladd Professor of Child Surgery, and Head of the Department at The Children's Hospital.

WILLIAM V. McDERMOTT, JR., M.D., Professor of Surgery, and Head of the Department at the Boston City Hospital.

FRANCIS D. MOORE, M.D., Moseley Professor of Surgery, Head of the Department at the Peter Bent Brigham Hospital.

PAUL S. RUSSELL, M.D., A.M. (hon.), John Homans Professor of Surgery, Head of the Department at the Massachusetts General Hospital, and Secretary to the Departments of Surgery.

MARSHALL K. BARTLETT, M.D., Clinical Professor of Surgery.

HENRY K. BEECHER, M.D., M.D. (hon.), Henry Isaiah Dorr Professor of Research and Teaching in Anaesthetics and Anaesthesia.

GEORGE H. A. CLOWES, JR., Clinical Professor of Surgery.

OLIVER COPE, M.D., DR. (hon.), Professor of Surgery.

DWIGHT E. HARKEN, M.D., Clinical Professor of Surgery.

J. HARTWELL HARRISON, M.D., Elliott Carr Cutler Professor of Surgery.

DONALD D. MATSON, M.D., Clinical Professor of Surgery.

THOMAS B. QUIGLEY, M.D., Clinical Professor of Surgery.

WILLIAM H. SWEET, M.D., D.Sc., Professor of Surgery at the Massachusetts General Hospital.

LEROY D. VANDAM, M.D., Clinical Professor of Anaesthesia.

CARL W. WALTER, M.D., Clinical Professor of Surgery.

RICHARD WARREN, M.D., Clinical Professor of Surgery.

CLAUDE E. WELCH, M.D., Clinical Professor of Surgery.

WILLIAM G. AUSTEN, M.D., Associate Professor of Surgery.

THOMAS W. BOTSFORD, M.D., Associate Clinical Professor of Surgery.

HARVARD MEDICAL SCHOOL

- CHILTON CRANE, M.D., Associate Clinical Professor of Surgery.
- EDWARD HAMLIN, JR., M.D., Associate Clinical Professor of Surgery.
- WYLAND F. LEADBETTER, M.D., Associate Clinical Professor of Surgery.
- GEORGE L. NARDI, M.D., Associate Clinical Professor of Surgery.
- MELVIN P. OSBORNE, M.D., Associate Clinical Professor of Surgery.
- HENRY T. BALLANTINE, JR., M.D., Assistant Clinical Professor of Surgery.
- HENRIK H. BENDIXEN, M.D., Assistant Clinical Professor of Anaesthesia.
- JOHN R. BROOKS, M.D., Assistant Clinical Professor of Surgery.
- EDWARD D. FRANK, M.D., Assistant Professor of Surgery at the Beth Israel Hospital, and Tutor in Medical Science.
- HOWARD A. FRANK, M.D., Assistant Professor of Surgery at the Beth Israel Hospital, and Tutor in Surgery.
- HERMES C. GRILLO, M.D., Assistant Clinical Professor of Surgery.
- SYLVESTER B. KELLEY, M.D., Assistant Clinical Professor of Surgery.
- WALTER S. KERR, JR., M.D., Assistant Clinical Professor of Surgery.
- LUTHER A. LONGINO, M.D., Assistant Clinical Professor of Surgery.
- DONALD W. MACCOLLUM, M.D., Assistant Clinical Professor of Surgery.
- VERNON H. MARK, M.D., Assistant Clinical Professor of Surgery.
- JOSEPH E. MURRAY, M.D., Assistant Clinical Professor of Surgery.
- W. BRADFORD PATTERSON, M.D., Assistant Clinical Professor of Surgery.
- WILLIAM H. PEARLMAN, PH.D., Assistant Professor of Biological Chemistry in the Department of Surgery.
- JOHN V. PIKULA, M.D., Assistant Clinical Professor of Surgery.
- JOHN W. RAKER, M.D., Assistant Clinical Professor of Surgery.
- ALEXANDER M. RUTENBURG, M.D., Assistant Professor of Surgery at the Beth Israel Hospital, and Tutor in Medical Science.

SURGERY

J. GORDON SCANNELL, M.D., Assistant Clinical Professor of Surgery.

ROBERT S. SHAW, M.D., Assistant Clinical Professor of Surgery (on leave July 1, 1965 through June 30, 1966).

GENE M. SMITH, PH.D., Assistant Professor in Psychology in Anaesthesia at the Massachusetts General Hospital.

ROBERT M. SMITH, M.D., Assistant Clinical Professor of Anaesthesia.

GEORGE W. B. STARKEY, M.D., Assistant Clinical Professor of Surgery.

HERBERT S. TALBOT, M.D., Assistant Clinical Professor of Surgery.

DONALD P. TODD, M.D., Assistant Clinical Professor of Anaesthesia.

WALTER R. WEGNER, M.D., Assistant Clinical Professor of Surgery.

HENRY J. WINN, PH.D., Assistant Professor of Bacteriology and Immunology in the Department of Surgery at the Massachusetts General Hospital.

MILTON H. ALPER, M.D., Clinical Associate in Anaesthesia.

BENJAMIN A. BARNES, M.D., Clinical Associate in Surgery.

ERNEST M. BARSAMIAN, M.D., Clinical Associate in Surgery.

WILLIAM F. BERNHARD, M.D., Clinical Associate in Surgery.

JOHN F. BURKE, M.D., Clinical Associate in Surgery.

BRADFORD CANNON, M.D., Clinical Associate in Surgery.

STANLEY DEUTSCH, PH.D., M.D., Associate in Anesthesia (from September 1, 1965).

GORDON A. DONALDSON, M.D., Clinical Associate in Surgery.

LAWRENCE D. EGBERT, M.D., Clinical Associate in Anaesthesia.

F. THOMAS GEPHART, M.D., Clinical Associate in Surgery.

SAMUEL GILMAN, M.D., Clinical Associate in Anaesthesia.

PAUL F. GRYSKA, M.D., Clinical Associate in Surgery.

PHILLIPS HALLOWELL, M.D., Clinical Associate in Anaesthesia.

JOHN HEDLEY-WHYTE, M.B., CH.B., Clinical Associate in Anaesthesia.

WILLIAM H. HENDREN, 3RD, M.D., Clinical Associate in Surgery.

HARVARD MEDICAL SCHOOL

- LOUIS HERMANSON, M.D., Clinical Associate in Surgery.
CHARLES E. HUGGINS, M.D., Clinical Associate in Surgery.
RAYMOND N. KJELLBERG, M.D., Associate in Surgery at the
Massachusetts General Hospital.
MYRON B. LAVER, M.D., Clinical Associate in Anaesthesia.
GUY W. LEADBETTER, M.D., Clinical Associate in Surgery.
CHARLES G. MIXTER, JR., M.D., Clinical Associate in Surgery.
S. RICHARD MUELLNER, M.D., Clinical Associate in Surgery (died
October 27, 1965).
ELLISON C. PIERCE, JR., M.D., Clinical Associate in Anaesthesia.
HENNING PONTOPPIDAN, M.D., Clinical Associate in Anaesthesia.
GEORGE S. RICHARDSON, M.D., Clinical Associate in Surgery.
CHESTER B. ROSOFF, M.D., Clinical Associate in Surgery and Tu-
tor in Medical Science.
EDWIN W. SALZMAN, M.D., Clinical Associate in Surgery.
SAMUEL R. SCHUSTER, M.D., Clinical Associate in Surgery.
JOHN SHILLITO, JR., M.D., Clinical Associate in Surgery.
KENNETH J. WELCH, M.D., Clinical Associate in Surgery.
H. BROWNELL WHEELER, M.D., Clinical Associate in Surgery.
EARLE W. WILKINS, JR., M.D., Clinical Associate in Surgery.
JOHN A. WILLIAMS, M.D., Associate in Surgery at the Beth Israel
Hospital.
RICHARD E. WILSON, M.D., Associate in Surgery and Tutor in
Medical Science.
FRANCIS M. WOODS, M.D., Clinical Associate in Surgery.
GEORGE AUSTEN, JR., Lecturer on Surgery.
GUSTAV J. FRAENKEL, M.B., CH.B., Visiting Lecturer on Surgery
(appointment expired December 31, 1965).
DAVID M. HUME, M.D., Visiting Lecturer on Surgery (March 1
through March 31, 1966).
SOPHUS C. H. JOHANSEN, M.D., Visiting Lecturer on Anaesthesia
(appointment expired November 30, 1965).
WILLIAM R. MERRINGTON, M.D., Lecturer on Surgery (appoint-
ment expired October 31, 1965).
MAREK SYCH, M.D., Visiting Lecturer on Anaesthesia (appoint-
ment expired August 31, 1965).

SURGERY

ADELBERT AMES, 3RD., M.D., Research Associate in Biological Chemistry in the Department of Surgery.

JAMES E. ANLIKER, PH.D., Research Associate in Anaesthesia.

STANLEY BULLIVANT, PH.D., Research Associate in Anatomy in the Department of Surgery.

PHILIP A. DRINKER, PH.D., Research Associate in Physiology in the Department of Surgery (from September 15, 1965).

RUTH B. KUNDSIN, SC.D., Research Associate in Bacteriology in the Department of Surgery.

PETER B. LAMBERT, M.B., CH.B., Research Associate in Surgery.

DAVID E. LEITH, M.D., Research Associate in Anaesthesia.

PADMAKAR P. LELE, M.D., DR.PHIL., Research Associate in Physiology in the Department of Surgery.

CARLO PALMERIO, M.D., Research Associate in Surgery.

ASENATH PETRIE, PH.D., Research Associate in Psychology in the Department of Surgery.

DANIEL A. POLLEN, M.D., Research Associate in Neurophysiology and Neuropharmacology in the Department of Surgery (from October 1, 1965).

SELMA H. RUTENBURG, M.D., Research Associate in Surgery.

FARIDA M. SAAD, PH.D., Research Associate in Biological Chemistry in the Department of Surgery (from September 15, 1965).

ROBERT C. SKARNES, PH.D., Research Associate in Bacteriology and Immunology in the Department of Surgery.

EDGAR E. SMITH, PH.D., Research Associate in Surgery.

ALBERT H. SOLOWAY, PH.D., Research Associate in Chemistry in the Department of Surgery.

ARTHUR L. ABRAMS, M.D., Instructor in Anaesthesia.

FREDERICK W. ACKROYD, M.D., Instructor in Surgery.

JOHN G. ADAMS, JR., M.D., Instructor in Anaesthesia.

NORMAN W. ANDREW, M.D., Instructor in Anaesthesia.

GEORGE E. BATTIT, M.D., Instructor in Anaesthesia.

SOLOMON BERG, M.A., Instructor in Surgery.

HARRISON BLACK, M.D., Instructor in Surgery.

HARVARD MEDICAL SCHOOL

MILTON BROUGHAM, M.D., Instructor in Surgery (from January 1, 1966).

HATHORN P. BROWN, M.D., Instructor in Surgery.

HENRY BROWN, M.D., Instructor in Surgery.

JOHN W. CHAMBERLAIN, M.D., Instructor in Surgery.

JOHN D. CONSTABLE, M.D., Instructor in Surgery.

NATHAN P. COUCH, M.D., Instructor in Surgery.

DEAN CROCKER, M.D., Instructor in Anaesthesia.

JOHN M. CROWE, M.D., Instructor in Surgery.

ROBERT E. DESAUTELS, M.D., Instructor in Surgery.

MICHAEL H. M. DYKES, M.B., CH.B., Instructor in Anaesthesia
(resigned September 30, 1965).

WILLIAM S. EASTON, M.D., Instructor in Anaesthesia.

ALBERT J. FINCK, M.D., Instructor in Anaesthesia.

WILLIAM F. FLYNN, M.D., Instructor in Surgery.

MOSES J. FOLKMAN, M.D., Instructor in Surgery.

EDWARD W. FRIEDMAN, M.D., Instructor in Surgery and Tutor in
Medical Science.

PHILIP G. GALLAGHER, M.D., Instructor in Surgery.

JULIUS E. GOLDBLATT, M.D., Instructor in Surgery.

ROBERT M. GOLDWYN, M.D., Instructor in Surgery.

EDWARD B. GRAY, JR., M.D., Instructor in Surgery.

HAROLD L. GREENBERG, D.M.D., M.D., Instructor in Surgery.

EUGENE A. GURALNICK, M.D., Instructor in Surgery.

HANNIBAL HAMLIN, M.D., Instructor in Surgery.

STEPHEN J. HEALEY, M.D., Instructor in Surgery.

ZOLMAN HELFAND, D.M.D., M.D., Instructor in Surgery.

CARL S. HOAR, JR., M.D., Instructor in Surgery.

STEPHEN J. HOYE, M.D., Instructor in Surgery.

LEO T. KELLY, M.D., Instructor in Surgery.

LEE G. KENDALL, M.D., Instructor in Surgery.

JAMES A. KRISHER, M.D., Instructor in Anaesthesia.

FEUNG B. LEE, M.D., Instructor in Surgery.

ARMAND A. LEFEMINE, M.D., Instructor in Surgery (resigned
December 31, 1965).

SURGERY

MARTIN S. LITWIN, M.D., Instructor in Surgery (from October 1, 1965).

SAMUEL LOWIS, M.D., Instructor in Surgery.

EDWARD M. MAHONEY, D.M.D., M.D., Instructor in Surgery.

DAVID T. MAHONY, M.D., Instructor in Surgery.

RONALD A. MALT, M.D., Instructor in Surgery.

PHILLIP S. MARCUS, M.D., Instructor in Anaesthesia.

CHARLES F. MCKHANN, M.D., Instructor in Surgery.

JOHN B. MCKITTRICK, M.D., Instructor in Surgery.

BUCKNAM MCPEEK, M.D., Instructor in Anaesthesia.

KEITH MERRILL, JR., M.D., Instructor in Surgery.

JOST J. MICHELSEN, M.D., Instructor in Surgery.

TASSADDUK H. MOGHUL, M.B., B.S., Instructor in Surgery (from September 1, 1965).

ANTHONY P. MONACO, M.D., Instructor in Surgery.

ALFRED P. MORGAN, JR., Instructor in Surgery.

ROGER H. MORRIS, M.D., Instructor in Anaesthesia.

DANIEL J. MULLANE, M.D., Instructor in Surgery.

LOUIS H. NASON, M.D., Instructor in Surgery.

ROBERT A. NEWTON, M.D., Instructor in Surgery.

JOHN C. NORMAN, M.D., Instructor in Surgery.

EDWARD T. O'HARA, M.D., Instructor in Surgery.

ROBERT G. OJEMANN, M.D., Instructor in Surgery.

EDWARD C. PARKHURST, M.D., Instructor in Surgery.

ALAN D. PERLMUTTER, M.D., Instructor in Surgery.

LOUIS N. PERNOKAS, M.D., Instructor in Surgery.

THOMAS C. PUTNAM, M.D., Instructor in Surgery (from January 1, 1966).

WILLIAM C. QUINBY, JR., M.D., Instructor in Surgery.

WILLIAM S. RACHLIN, M.D., Instructor in Surgery.

GRANT V. RODKEY, M.D., Instructor in Surgery.

JOHN L. ROWBOTHAM, M.D., Instructor in Surgery.

JOSEPH F. RUSCIO, M.D., Instructor in Anaesthesia.

MARIO R. SALEM, M.D., Instructor in Anaesthesia.

BERNARD R. SEARS, M.D., Instructor in Surgery.

ARNOLD L. SEGEL, M.D., Instructor in Surgery.

HARVARD MEDICAL SCHOOL

- TALBOT D. SEIGNE, M.B., CH.B., Instructor in Anaesthesia.
DONALD B. SHAHON, M.D., PH.D., Instructor in Surgery.
ELIOT M. SLATER, M.D., Instructor in Anaesthesia (resigned February 28, 1966).
JOHN C. SNOW, M.D., Instructor in Anaesthesia.
ALAN R. SPIEVACK, M.D., Instructor in Surgery.
ALBERT M. STARR, M.D., Instructor in Surgery.
ARNOLD STARR, M.D., Instructor in Surgery.
HOWARD I. SUBY, M.D., Instructor in Surgery.
WARREN J. TAYLOR, M.D., Instructor in Surgery.
HOWARD A. TRACHTENBERG, M.D., Instructor in Anaesthesia.
JESS B. WEISS, M.D., Instructor in Anaesthesia.
FRANK C. WHEELOCK, JR., M.D., Instructor in Surgery.
MALVIN F. WHITE, D.M.D., M.D., Instructor in Surgery.
LORANDE M. WOODRUFF, M.D., Instructor in Surgery.
MASAO YATSUHASHI, M.D., Instructor in Surgery.
GERALD L. ZEITLIN, M.B., CH.B., Instructor in Anaesthesia (from October 10, 1965).
HART ACHENBACH, M.D., Assistant in Surgery.
JOHN R. ALGIRD, M.D., Assistant in Anaesthesia.
RICHARD C. AUSTIN, M.D., Assistant in Surgery.
EDWARD P. BAKER, JR., Assistant in Surgery.
GLENN E. BEHRINGER, M.D., Assistant in Surgery.
HAROLD BENGLOFF, M.D., Assistant in Surgery.
RONALD BIRKENFELD, M.D., Assistant in Surgery (from January 1, 1966).
JOAN M. BROWN, M.B., CH.B., Assistant in Anaesthesia (from October 15, 1965).
CHARLES B. BURBANK, M.D., Assistant in Surgery.
EDWIN L. CARTER, M.D., Assistant in Surgery.
DORIS W. COLE, M.B., CH.B., Assistant in Anaesthesia.
CESARE G. COLETTA, M.D., Assistant in Anaesthesia.
JOSEPH W. COPEL, M.D., Assistant in Surgery.
BRIAN C. DALTON, M.D., Assistant in Anaesthesia.
RALPH C. DARLING, JR., Assistant in Surgery.
CHESTER J. DEXTER, M.D., Assistant in Surgery.

SURGERY

- ROBERT F. DINE, M.D., Assistant in Surgery.
JOSEPH F. DORSEY, M.D., Assistant in Surgery (from September 1, 1965).
NANCY J. ENGESET, M.D., Assistant in Anaesthesia (from October 15, 1965).
ANGELO ERAKLIS, M.D., Assistant in Surgery.
FRANK FRANCO, M.D., Assistant in Surgery.
JOSEPH H. GALICICH, JR., M.D., Assistant in Surgery.
BENNIE GEFFIN, M.B., CH.B., Assistant in Anaesthesia.
RAYMOND W. GIBBS, M.D., Assistant in Surgery.
RICHARD F. GIBBS, M.D., Assistant in Anaesthesia.
STANLEY K. GORDON, M.D., Assistant in Surgery.
ERNEST GRABLE, M.D., Assistant in Surgery.
IRAD B. HARDY, JR., M.D., Assistant in Surgery.
JOHN M. HEAD, M.D., Assistant in Surgery.
STEPHAN E. HEDBERG, M.D., Assistant in Surgery.
DOROTHY K. HEERDEGEN, M.D., Assistant in Anaesthesia.
GUENTHER E. HERPFER, M.D., Assistant in Anaesthesia (from October 1, 1965).
HYMAN A. HERSHMAN, M.D., Assistant in Surgery.
CLEMENT A. HIEBERT, M.D., Assistant in Surgery.
ALFRED T. JOSEPH, D.M.D., M.D., Assistant in Surgery.
CONSTANTINE I. KOSTAS, M.D., Assistant in Surgery (from October 1, 1965).
CLINTON N. KOUFMAN, M.D., Assistant in Surgery.
SUSANNE J. LAMDIN, M.D., Assistant in Anaesthesia.
LEE V. LEAK, PH.D., Assistant in Surgery.
LUCY LEE, M.D., Assistant in Anaesthesia.
SABIN S. LEVENSON, M.D., Assistant in Surgery.
HOWARD J. LEWENSTEIN, M.D., Assistant in Surgery.
JOHN B. LLOYD, M.D., Assistant in Surgery.
EDWARD LOWENSTEIN, M.D., Assistant in Anaesthesia.
JOHN LYNCH, M.D., Assistant in Surgery.
RITA A. MANZI, M.D., Assistant in Anaesthesia (from January 1, 1966).
DAVID E. MARCELLO, JR., M.D., Assistant in Surgery.

HARVARD MEDICAL SCHOOL

- LEO T. McCALLUM, M.D., Assistant in Surgery.
EUGENE F. McDONOUGH, JR., Assistant in Surgery.
CARROLL C. MILLER, M.D., Assistant in Surgery.
TASSADUK H. MOGHUL, M.B., B.S., Assistant in Surgery (through August 31, 1965).
JOHN D. MURPHY, M.D., Assistant in Anaesthesia.
ANTHONY S. PATTON, M.D., Assistant in Surgery (from January 1, 1966).
ANNE W. PHILLIPS, M.D., Assistant in Surgery.
MARVIN J. POWELL, M.D., Assistant in Surgery (from January 1, 1966).
FRANCIS X. ROCKETT, M.D., Assistant in Surgery.
WILLIAM P. ROGERS, JR., M.D., Assistant in Surgery.
LEON ROSENFELD, M.D., Assistant in Surgery.
DAVID ROTH, M.D., Assistant in Surgery.
S. PETER SARRIS, M.D., Assistant in Surgery.
N. PAUL SCHEPIS, M.D., Assistant in Anaesthesia.
ROBERT SHAPIRO, M.D., Assistant in Surgery.
MELVIN I. SHOUL, M.D., Assistant in Surgery.
FREDERICK A. SIMEONE, M.D., Assistant in Surgery.
CHESTER R. STARVISH, M.D., Assistant in Anaesthesia.
WILLIAM L. STRICKLER, M.D., Assistant in Surgery.
KUNIO SUWA, M.D., Assistant in Anaesthesia.
JUDITH A. TASSIE, B.S., Assistant in Anaesthesia.
ROBIN A. VAN DER MOLEN, M.B., CH.B., Assistant in Anaesthesia (from October 15, 1965).
JAMES C. WALKER, M.D., Assistant in Surgery (from January 1, 1966).
PHILIP H. WALKER, M.D., Assistant in Surgery.
SARITA G. WALZER, M.D., Assistant in Anaesthesia.
CHIU-AN WANG, M.D., Assistant in Surgery.
DOROTHY A. WESCOTT, M.B., B.S., Assistant in Anaesthesia.
RALEIGH L. WRIGHT, M.D., Assistant in Surgery.
LAWRENCE I. ZAROFF, M.D., Assistant in Surgery.
WILLIAM M. ABBOTT, M.D., Research Fellow in Surgery.

SURGERY

- JUAN M. ACOSTA, M.D., Research Fellow in Surgery (appointment expired December 31, 1965).
- SHAKEAB A. ALSHABKHOUN, M.D., Research Fellow in Surgery.
- EGIL AMUNDSEN, M.D., Research Fellow in Surgery (appointment expired August 31, 1965).
- LEONARDO P. BASURTO, M.D., Research Fellow in Surgery.
- JUAN E. BODA, M.B., Research Fellow in Surgery (from September 15, 1965).
- CONRADO C. BONDOC, M.D., Research Fellow in Surgery.
- LEONARD S. BUSHNELL, M.D., Research Fellow in Anaesthesia (from September 1, 1965).
- DOUGLAS N. BUTLER, PH.D., Research Fellow in Surgery (appointment expired September 30, 1965).
- ALVARO CARO, M.D., Research Fellow in Surgery.
- AURELIO CHAUX, M.D., Research Fellow in Surgery (from January 1, 1966).
- TOYOAKI CHIBA, M.D., Research Fellow in Surgery.
- JAMES E. CLEAVER, PH.D., Research Fellow in Surgery.
- THOMAS P. COLE, M.B., CH.B., Research Fellow in Surgery (from October 1, 1965).
- ARNOLD G. CORAN, M.D., Research Fellow in Surgery.
- VICTOR H. COVELLI, M.D., Research Fellow in Surgery.
- JOHN L. DAWSON, M.B., B.S., Research Fellow in Surgery (resigned August 31, 1965).
- ARNOLD G. DIETHELM, M.D., Research Fellow in Surgery (from October 1, 1965).
- JEAN-MICHEL DUBERNARD, M.D., Research Fellow in Surgery (from October 1, 1965).
- MICHEL A. DUVELLEROY, M.D., Research Fellow in Anaesthesia (from September 1, 1965).
- W. KEITH ELTRINGHAM, M.B., CH.B., Research Fellow in Surgery (from February 1, 1966).
- ERIK EYSKENS, M.D., Research Fellow in Surgery (from December 1, 1965).
- JOAN W. FLACKE, M.D., Research Fellow in Anaesthesia.

HARVARD MEDICAL SCHOOL

- JOHN G. GOGAS, M.D., Research Fellow in Surgery (from October 15, 1965).
- JEAN L. GUERIGUIAN, M.D., Research Fellow in Biological Chemistry in the Department of Surgery (from September 15, 1965).
- JAMES R. W. GUMPert, M.B., Ch.B., Research Fellow in Surgery (from January 1, 1966).
- HANS-JOACHIM HALBFASS, M.D., Research Fellow in Surgery.
- GRAEME L. HAMMOND, M.D., Research in Surgery.
- FELIX H. HARDER, M.D., Research Fellow in Surgery.
- TSUGUO HASEGAWA, M.D., Ph.D., Research Fellow in Surgery (appointment expired July 31, 1965).
- FRITZ HASLINGER, Ph.D., Research Fellow in Surgery.
- HIROSHI HATANAKA, M.D., Research Fellow in Surgery.
- KAARLO O. HEISKANEN, M.D., Research Fellow in Surgery.
- HARTMUT B. HEITMANN, M.D., Research Fellow in Anaesthesia.
- KARL H. HOVIND, M.D., Research Fellow in Surgery.
- EDUARD HRADEC, M.D., Research Fellow in Surgery (from January 1, 1966).
- REIKI ISHIZUKA, M.D., Research Fellow in Surgery.
- MICHEL JEANNET, M.D., Research Fellow in Surgery (from January 1, 1966).
- MARK E. JENNY, M.D., Research Fellow in Surgery (from April 15, 1966).
- GORDON J. JOHNSON, M.B., Ch.B., Research Fellow in Surgery (appointment expired September 30, 1965).
- JULIO JOISON, M.D., Research Fellow in Surgery.
- OLGA JONASSON, M.D., Research Fellow in Surgery (from August 1, 1965).
- NIGEL C. KEDDIE, M.B., B.S., Research Fellow in Surgery (appointment expired August 31, 1965).
- PAUL C. A. KINNAERT, M.D., Research Fellow in Surgery (from January 1, 1966).
- PAUL KOLKER, M.D., Research Fellow in Surgery (from August 1, 1965).

SURGERY

- MASAYOSHI KOWADA, M.D., Research Fellow in Surgery (appointment expired May 31, 1965).
- JOHN H. LYONS, JR., M.D., Research Fellow in Surgery (resigned December 31, 1965).
- JOHN D. MACARTHUR, M.D., Research Fellow in Surgery.
- ROBERT R. MAGINN, M.D., Research Fellow in Surgery (from January 1, 1966).
- RAUL MARINO, JR., Research Fellow in Surgery.
- YUJI MARUYAMA, M.D., Research Fellow in Surgery.
- JACK M. MATLOFF, M.D., Research Fellow in Surgery.
- EDWARD D. McLAUGHLIN, M.D., Research Fellow in Surgery.
- WILLIAM M. MEE, M.B., B.S., Research Fellow in Surgery (from September 1, 1965).
- ANDRZEJ HENRYK MICHALSKI, M.D., Research Fellow in Anaesthesia.
- MICHIO MITO, M.D., D.M.S., Research Fellow in Surgery.
- HEITARO MOGAMI, M.D., PH.D., Research Fellow in Surgery (from September 15, 1965).
- JOHN E. MORAN, M.D., Research Fellow in Surgery.
- MARY J. MORRIS, M.B., B.S., Research Fellow in Anaesthesia.
- PETER J. MORRIS, M.B., Research Fellow in Surgery.
- SORITA MOURKIDOU, M.D., Research Fellow in Anaesthesia (appointment expired August 31, 1965).
- SHIHADAH N. NAYFEH, PH.D., Research Fellow in Biological Chemistry in the Department of Surgery (appointment expired October 31, 1965).
- SAMUEL D. NELSON, M.B., CH.B., Research Fellow in Surgery (from October 1, 1965).
- JOHN F. NEWCOMBE, M.B., CH.B., Research Fellow in Surgery (appointment expired September 30, 1965).
- JOHN E. OLSON, M.D., Research Fellow in Surgery (appointment expired August 31, 1965).
- HENRY B. OTHERSON, M.D., Research Fellow in Surgery (appointment expired July 31, 1965).
- ANGEL M. C. PAREDES, M.D., Research Fellow in Surgery (resigned July 31, 1965).

HARVARD MEDICAL SCHOOL

HUGO J. PARRA, M.D., Research Fellow in Surgery.

JAMES R. PLUTH, M.D., Research Fellow in Surgery (from January 1, 1966).

JOHN L. PROVAN, M.B., B.S., Research Fellow in Surgery (appointment expired September 30, 1965).

PASKO RAKIC, M.D., Research Fellow in Surgery.

MARUF A. RAZZUK, M.D., Research Fellow in Surgery.

ALAN B. RETIK, M.D., Research Fellow in Surgery.

JUAN E. RODA, M.B., CH.B., Research Fellow in Surgery (from November 1, 1965).

CESAR L. ROSALES, M.D., Research Fellow in Surgery (resigned September 30, 1965).

RICHARD SIMMONS, M.D., Research Fellow in Surgery (appointment expired December 31, 1965).

JACK S. SIZER, M.D., Research Fellow in Surgery.

JOHN J. SKILLMAN, M.D., Research Fellow in Surgery.

S. FREDERICK SLAFSKY, M.D., Research Fellow in Surgery (appointment expired August 31, 1965).

DAVID C. SMITH, PH.D., Research Fellow in Surgery.

FRANK P. STUART, M.D., Research Fellow in Surgery.

TARO TAMADA, M.D., Research Fellow in Surgery.

JOHN M. TEW, M.D., Research Fellow in Surgery (appointment expired December 31, 1965).

FUSAYOSHI TOMITA, M.D., Research Fellow in Surgery.

EDGAR E. TORRES, M.D., Research Fellow in Surgery (appointment expires April 30, 1966).

MURDO A. TURNER, M.B., CH.B., Research Fellow in Surgery (from September 1, 1965).

PETER M. WINTER, M.D., Research Fellow in Anaesthesia.

CLARENCE E. ZIMMERMAN II, M.D., Research Fellow in Surgery (appointment expired December 31, 1965).

ROBERT M. ZOLLINGER, JR., M.D., Research Fellow in Surgery (from December 1, 1965).

WALTER ZUCKERMAN, M.D., Research Fellow in Surgery (from September 1, 1965).

SURGERY

- MENELAOS A. ALIAPOULIOS, M.D., Arthur Tracy Cabot Teaching Fellow in Surgery (from October 1, 1965).
- MORTIMER J. BUCKLEY, M.D., Teaching Fellow in Surgery.
- JULIUSZ CIEMBRONIEWICZ, M.D., Teaching Fellow in Surgery.
- FRANCIS D. COGLIANO, M.D., Teaching Fellow in Surgery (January 1 through February 28, 1966).
- MYRON E. FREUND, M.D., Teaching Fellow in Surgery (from December 31, 1965).
- YECHIEL D. HEILBRONN, M.D., Teaching Fellow in Surgery (from January 1, 1966).
- MURRAY H. HELFANT, M.D., Teaching Fellow in Surgery (appointment expired December 31, 1965).
- LUCIUS T. HILL, JR., M.D., Teaching Fellow in Surgery (from October 1, 1965).
- JOHN H. MAHAN, M.D., Teaching Fellow in Surgery (from September 30, 1965).
- RUSSELL F. MINTON, JR., M.D., Teaching Fellow in Surgery.
- LOUIS M. ORR, M.D., Teaching Fellow in Surgery (from January 1, 1966).
- LESLIE W. OTTINGER, M.D., Teaching Fellow in Surgery.
- LARRY K. PAGE, M.D., Teaching Fellow in Surgery.
- LOUIS F. PLZAK, JR., M.D., Teaching Fellow in Surgery (from January 1, 1966).
- THOMAS C. PUTNAM, M.D., Teaching Fellow in Surgery (through December 31, 1965).
- MASATAKA SHIRAKI, M.D., Teaching Fellow in Surgery (from November 1, 1965).
- DAVID B. SKINNER, M.D., Teaching Fellow in Surgery (appointment expired December 31, 1965).
- RUDOLPH W. VOLLMAN, M.D., Teaching Fellow in Surgery (March 1 through April 30, 1966).
- HAROLD A. WILKINSON, M.D., PH.D., Teaching Fellow in Surgery.
- FRANCIS G. WOLFORT, M.D., Teaching Fellow in Surgery (from May 1, 1966).

HARVARD MEDICAL SCHOOL

Affiliated:

ASENATH PETRIE, PH.D., Research Associate in Psychology in the Department of Psychiatry.

Required Courses

Instruction will be given by amphitheatre clinics, lectures, and conferences, together with section teaching in the wards and out-patient departments of the hospitals and in the surgical research laboratories.

SURGERY. *Second Year.*—The course is designed to correlate preclinical sciences with the basic principles underlying the surgical management of injury and disease. The Department of Surgery joins with the Department of Medicine in a series of exercises in physical diagnosis and laboratory medicine to offer unified instruction in case taking. Practical exercises are offered that introduce the student to basic surgical techniques.

SURGERY. *Introduction to the Clinic.*—This new program, conducted on a twelve-week basis is considered as a unit, with approximately one third of the total time devoted to surgical instruction, one third to internal medicine, and one third to the various special interests in both medicine and surgery. During the course of surgery, intensive instruction in surgical disease, surgical pathology, surgical treatment and surgical techniques is given at the B.I.H., B.C.H., M.G.H., and P.B.B.H.

SURGERY. *Principal Clinical Year.*—In the new curriculum a twelve month clinical year is divided into four three month periods. For each student one of these periods will be devoted to surgery at the Beth Israel Hospital, the Boston City Hospital, the Massachusetts General Hospital or the Peter Bent Brigham Hospital. Certain surgical specialty interests are included in the surgery quadrimester, such as Urology, Anaesthesia and Neurosurgery as well as Outpatient and Emergency Ward experience. Other surgical interests and special areas such as Orthopedics, Otolaryngology and Ophthalmology are included in another quadrimester.

SECOND YEAR

Section work, case taking, lectures, and demonstrations on the physical diagnosis of surgical disease in conjunction with the Department of Medicine. Drs. FINE, McDERMOTT, MOORE,

SURGERY

HOURS

RUSSELL, and ASSOCIATES. B.I.H., B.C.H., M.G.H., and P.B.B.H. Each student has twenty-four exercises.

84

INTRODUCTION TO THE CLINIC

Exercises in sections in the wards and out-patient departments at the B.I.H., B.C.H., M.G.H., and P.B.B.H.

121

PRINCIPAL CLINICAL YEAR

Clinical Clerkship: B.I.H. (Dr. FINE and ASSOCIATES); B.C.H. (Dr. McDERMOTT and ASSOCIATES); M.G.H. (Dr. RUSSELL and ASSOCIATES); P.B.B.H. (Dr. MOORE and ASSOCIATES).

480

Fourth Year Elective Courses

A wide range of special opportunities is made available in the various surgical departments for additional clinical experience and for participation in programs of laboratory investigation related to current surgical problems (see below).

BLOCK COURSES

- 501M. Clinical Surgery. Dr. McDERMOTT and ASSOCIATES.
- 502M. Children's Surgery. SURGICAL STAFF.
- 504M. Clinical Application of Surgical Biology. Dr. RUSSELL and ASSOCIATES.
- 505M. Emergency Care — Surgical and Medical. Drs. WILKINS and BIRD.
- 506M. Infectious Disease: Surgical Infection. Dr. BURKE and ASSOCIATES.
- 507M. Endocrinology with Special Reference to the Ovary. Drs. ULFELDER, G. S. RICHARDSON, McARTHUR, and SCULLY. (*Same course as Obstetrics and Gynecology 513M.*)
- 508M. Pulmonary I. Chronic Chest Disease: Medical and Surgical Aspects. Drs. SCANNELL and BIRD.
- 509M. Pulmonary II. Management of Acute and Chronic Respiratory Insufficiency. Dr. PONTOPPIDAN and ASSOCIATES.
- 510M. Cardiovascular Physiology. Dr. W. G. AUSTEN.
- 511M. Cardiac Surgery. Drs. SCANNELL and W. G. AUSTEN.
- 512M. Management of the Patient for Anesthesia and Surgery. Drs. BEECHER, TODD, and ASSOCIATES.
- 513M. Pediatric Surgery. Dr. HENDREN. (*Same course as Pediatrics 525M.*)
- 514M. Advanced Surgery. Dr. R. WARREN and ASSOCIATES.
- 515M. Plastic and Transplantation Surgery. Dr. J. E. MURRAY and ASSOCIATES.

HARVARD MEDICAL SCHOOL

- 516M. General and Emergency Surgery. Dr. F. D. MOORE and STAFF.
- 517M. Urology. Dr. J. H. HARRISON and ASSOCIATES.
- 518M. Tumors and Cancer. Drs. BOTSFORD, R. E. WILSON and ASSOCIATES.
- 519M. Neurosurgery. Dr. MATSON and ASSOCIATES.
- 520M. Peripheral Vascular Surgery. Dr. CRANE and ASSOCIATES.
- 521M. Anesthesia. Dr. VANDAM and ASSOCIATES.
- 522M. Cardiac Surgery. Dr. HARKEN and ASSOCIATES.
- 523M. Spinal Cord Injury. Dr. H. S. TALBOT and ASSOCIATES.
- 524M. Comprehensive Gynecology. Dr. S. STURGIS. (*Same course as Obstetrics and Gynecology 511M.*)
- 525M. Advanced Clinical Surgery. Dr. FINE and ASSOCIATES.
- 526M. Thoracic Surgery. Dr. H. A. FRANK.
- 527M. Peripheral Vascular Surgery. Dr. E. D. FRANK.
- 528M. Clinical Studies of Antibiotic Therapy. Dr. A. M. RUTENBERG.
- 529M. Neurosurgery. Dr. SWEET and ASSOCIATES.
- 530M. Clinical Gastrointestinal Disease. Dr. J. R. BROOKS.

BLOCK COURSES — RESEARCH

- 801. Research Experience. Drs. McDERMOTT, H. BROWN, M. BROWN, CLOWES, MARK, OSBORNE, PIKULA, and ASSOCIATES.
- 802. Surgical Biology — Research Methods. Dr. RUSSELL and ASSOCIATES.
- 803. Cardio-Respiratory Physiology. Dr. BENDIXEN and ASSOCIATES.
- 804. Psychopharmacology. Drs. BEECHER, G. M. SMITH, and ANLIKER.
- 805. Blood Gas and Acid-Base Chemistry. Dr. LAVER and ASSOCIATES.
- 806. Surgical Investigation. Dr. F. D. MOORE.
- 807. Surgical Investigation. Dr. J. E. MURRAY.
- 808. Surgical Investigation. Dr. R. E. WILSON.
- 809. Surgical Investigation. Dr. W. H. PEARLMAN. (*Same course as Biological Chemistry 826*).
- 810. Surgical Investigation. Dr. COUCH.
- 811. Surgical Investigation. Dr. A. P. MORGAN.
- 812. Surgical Investigation. Dr. WALTER.
- 813. Surgical Investigation. Dr. VANDAM.
- 814. Surgical Investigation. Dr. H. B. WHEELER.
- 815. Pathophysiology of Liver Disease. Drs. DAVIDSON, McDERMOTT, and ASSOCIATES. (*Same course as Medicine 816*).
- 816. Surgical Research. Dr. FINE.
- 817. Surgical Research. Dr. H. A. FRANK.
- 818. Surgical Research. Dr. E. D. FRANK.
- 819. Surgical Research. Dr. A. M. RUTENBURG.
- 820. Surgical Research. Dr. ROSOFF.
- 821. Surgical Research. Dr. J. A. WILLIAMS.
- 822. Surgical Research. Dr. LAMBERT.
- 823. Surgical Research. Dr. ASHFORD.
- 824. Surgical Research. Dr. E. E. SMITH.
- 825. Basic Sciences of Neurosurgery. Drs. SWEET, AMES. BALLANTINE, BROWNELL, BULLIVANT, ERVIN, KJELLBERG, LELE, OJEMANN, SOLOWAY, WRIGHT, and ASSOCIATES.

SURGERY

LONGITUDINAL COURSES

- 703. Clinical and Investigative Gastroenterology. Drs. OSBORNE, ZAMCHEK, and ASSOCIATES. (*Same course as Medicine 715.*)
- 704. Pediatric Urologic Problems. Dr. PERLMUTTER. (*Same course as Pediatrics 701.*)
- 705. Advanced Cardioangiologiy. Drs. R. WARREN, DEXTER, HARKEN, GORLIN, and CRANE. (*Same course as Medicine 717.*)
- 706. Trauma. Drs. MOORE, W. T. GREEN, BANKS, QUIGLEY, MATSON, HARRISON, VANDAM, and MORGAN. (*Same course as Orthopedic Surgery 701.*)
- 707. Surgical Biology. Dr. RUSSELL and ASSOCIATES.
- 708. Advanced Endocrinology. Drs. THORN, MOORE, EMERSON, HARRISON, LAULER, MATSON, SELENKOW, and WILSON. (*Same course as Medicine 709.*)

HARVARD MEDICAL SCHOOL

INTERDEPARTMENTAL AND SPECIAL COURSES

Fourth Year Elective Courses

BLOCK COURSES

- 602M. Biology of Malignant Disease. Drs. RAKER, FARBER, LISCO, ZAMECNIK, HIATT, KOHN, and ASSOCIATES.
- 603. Organ Biology. Drs. MAJNO, WILSON, MARSHALL, and MEMBERS OF THE DEPARTMENTS OF PATHOLOGY, PHYSIOLOGY, and PHARMACOLOGY.
- 604M. Ambulatory Medicine. Drs. STOECKLE, CONNELLY, and SIFNEOS.
- 605M. Experimental Biology of Oncolytic and Immunosuppressive Agents. Dr. FARBER and ASSOCIATES.

LONGITUDINAL COURSES

- 751. Clinical Pharmacology of Oncolytic and Immunosuppressive Agents. Drs. FARBER, HALL, and ASSOCIATES.
- 752. Metabolic Consequences of Neoplasia in Man. Drs. THORN, FARBER, HALL, and ASSOCIATES.
- 753M. Family Health Care Program. Drs. ALPERT, BULLARD, SIDEL, ROBBINS, and ASSOCIATES.

TROPICAL PUBLIC HEALTH

TROPICAL PUBLIC HEALTH

This course is given by the following members of the Faculty of the Harvard School of Public Health.

THOMAS H. WELLER, M.D., LL.D., Richard Pearson Strong Professor of Tropical Public Health, and Head of the Department.

FRANKLIN A. NEVA, M.D., John La Porte Given Professor of Tropical Public Health.

ELI CHERNIN, S.D., Associate Professor of Tropical Public Health.

THOMAS E. FROTHINGHAM, M.D., Associate Professor of Tropical Public Health.

DIETER KOCH-WESER, M.D., Associate Professor of Tropical Health and Human Ecology.

EDWARD H. MICHELSON, PH.D., Assistant Professor of Tropical Public Health.

STEVE C. PAN, M.D., M.P.H., Assistant Professor of Tropical Public Health.

ANDREW SPIELMAN, S.D., Associate in Tropical Public Health.

Required Course

PARASITOLOGY A. *Second Year.*—The important helminth and protozoan parasites of man are considered with reference to their geographic distribution, identification, mode of transmission, pathogenesis, immune reactions and methods for prevention and control. Clinical aspects and chemotherapy of parasitic diseases are discussed. Emphasis is given to methods of laboratory diagnosis.

SECOND YEAR

HOURS

Lectures, demonstrations, and laboratory work. Dr. WELLER and STAFF. Monday, Wednesday, and Friday afternoons, January and February

41

HARVARD MEDICAL SCHOOL

Elective and Voluntary Courses

Courses offered by the Department of Tropical Public Health in the School of Public Health are open, as electives, to medical students. The research facilities of the Department are available for elective work by qualified students, and opportunities for experience in tropical areas may be arranged. (See also page 267).

PUBLIC HEALTH

SCHOOL OF PUBLIC HEALTH

The courses listed below are given by members of the Faculty of the School of Public Health and are offered as elective courses to members of the fourth year class of the Medical School.

Fourth Year Elective Courses

BLOCK COURSES — RESEARCH

- 801. Laboratory Research on Agents and Animal Hosts of Infectious Diseases. Dr. WELLER and ASSOCIATES.
- 802. Field Training in the Tropics. Drs. WELLER and FROTHINGHAM.
- 803. Respiratory and Environmental Physiology. Drs. WHITTENBERGER, MEAD, and ASSOCIATES.
- 804. Research in Epidemiology. Dr. MACMAHON.

LONGITUDINAL COURSES

- 701. Statistical Methods in Research. Drs. REED and WORCESTER. (*Same course as Biostatistics 2 c,d., S.P.H.*)
- 702. Epidemiology of Non-Infectious Disease. Dr. MACMAHON. (*Same course as Epidemiology 2 c,d., S.P.H.*)
- 703. Human Heredity. Dr. HUTCHINSON. (*Same course as Epidemiology 4 c,d., S.P.H.*)
- 704. Current Research in Microbiology. Dr. Snyder. (*Same course as Microbiology 2d, S.P.H.*)
- 705. Public Health Laboratory Procedures. Dr. MURRAY and ASSOCIATES. (*Same course as Microbiology 11c, S.P.H.*)
- 706. Rickettsial and Viral Diseases of Public Health Importance. Dr. CHANG and ASSOCIATES. (*Same course as Microbiology 13d, S.P.H.*)
- 707. Special Topics in Respiratory Physiology. Dr. MEAD and ASSOCIATES. (*Same course as Physiology 4d, S.P.H.*)
- 708. Radiation Biology. Dr. LITTLE. (*Same course as Physiology 5c,d, S.P.H.*)
- 709. Problems in Tropical Health. Dr. WELLER and GUEST LECTURERS. (*Same course as Tropical Public Health 3d, S.P.H.*)
- 710. Laboratory Technics in Parasitology. Dr. PAN. (*Same course as Tropical Public Health 7c, S.P.H.*)
- 711. Introduction to Molluscs of Public Health Importance. Dr. MICHELSON. (*Same course as Tropical Public Health 8d, S.P.H.*)
- 712. Introduction to Medical Entomology. Dr. SPIELMAN. (*Same course as Tropical Public Health 9d, S.P.H.*)
- 713. Clinical and Pathologic Features of Tropical Diseases. Drs. NEVA and VON LICHTENBERG. (*Same course as Tropical Public Health 10c, S.P.H.*)
- 714. Tuberculosis. Dr. KOCH-WESER and Miss CAMPBELL. (*Same course as Microbiology and Tropical Public Health 40c, S.P.H.*)
- 715. Nutritional Aspects of Human Disease. Dr. STARE and STAFF. (*Same course as Nutrition 40c,d, S.P.H.*)

DEGREES CONFERRED

ON JUNE 17, 1965, ONE HUNDRED THIRTY-TWO DEGREES WERE
CONFERRED AS FOLLOWS:

M.D.

- RICHARD JEROME AADALEN, A.B. 1961.
HERBERT DAN ADAMS, A.B. (*Yale Univ.*) 1961.
LARRY SIMON ANDERSON, A.B., (*Univ. of Washington*) 1961.
CHARLES KIRK AVENT, A.B. (*Vanderbilt Univ.*) 1961.
WILLIAM WARREN BABSON, JR., A.B. (*Dartmouth Coll.*) 1961, B.MED.SCI.
(*ibid.*) 1963.
STANLEY SHERMAN BALDWIN, A.B. (*Princeton Univ.*) 1961.
MICHAEL CHARLES BEACHLEY, A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
(*ibid.*) 1963.
DON CARL BIENFANG, S.B. (*Univ. of Illinois*) 1960.
CARL VALDEMAR BISGARD, JR.
IRA BARRIE BLACK, A.B. (*Columbia Univ.*) 1961.
RONALD BRISMAN, A.B. 1961.
LESLEY SCHILD BUNIM, A.B. (*Barnard Coll.*) 1961.
JOHN LANCASTER CARMODY, A.B. (*Yale Univ.*) 1961.
CHARLES WICKERSHAM CASELLA, A.B. 1961.
CECIL HENRY CHALLY, S.B. (*Univ. of North Dakota*) 1961, S.B. IN MED.
(*ibid.*) 1963.
DANIEL LINDSAY CLARK, A.B. (*Johns Hopkins Univ.*) 1961, B.MED.SCI.
(*Dartmouth Coll.*) 1963.
HARVEY GERALD CLERMONT, S.B. (*Coll. of the Holy Cross*) 1961.
EDWARD MITCHELL COHEN, A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
(*ibid.*) 1963.
JOHN CARY COOKE, 3D, A.B. (*Rice Univ.*) 1961.
PAUL MILTON COX, JR., S.B. (*Massachusetts Inst. of Technology*) 1961.
STEPHEN RALPH CRESPIN, A.B. 1960.
KENNETH SIGWALD DANIELSON, A.B. (*Univ. of Rochester*) 1961, B.MED.
SCI. (*Dartmouth Coll.*) 1963.
FRANK CHARLES DE GIACOMO, A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
(*ibid.*) 1963.
WILLIAM DONNER DENCKLA, A.B. 1956.
GEORGE FRANKLIN DONAHOWER, A.B. (*Denison Univ.*) 1961.

DEGREES CONFERRED

- EDWARD LEWIS DUBROW, A.B. (*Princeton Univ.*) 1961.
 WILLIAM BRUCE DUNKMAN, A.B. (*Amherst Coll.*) 1961.
 MINA FARHAD, A.B. (*Barnard Coll.*) 1957, A.M. (*Radcliffe Coll.*) 1958,
 PH.D. (*Harvard Univ.*) 1963.
 BRUCE ALLEN FELDMAN, A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
 (*ibid.*) 1963.
 THOMAS LEONARD FISHER, A.B. 1959.
 GEORGE PAUL GEWIRTZ, A.B., (*Dartmouth Coll.*) 1962, B.MED.SCI.
 (*ibid.*) 1963.
 VALERIE ANN LEVAL GRAHAM, A.B. (*Radcliffe Coll.*) 1956, B.MED.SCI.
 (*Dartmouth Coll.*) 1962.
 RUSSELL WILLIS HARDY, JR., A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
 (*ibid.*) 1963.
 GLENN ELMER HAUGHIE, A.B. 1961.
 ROBERT DAVID HOLLENBERG, A.B. (*Swarthmore Coll.*) 1961.
 DOROTHY ANNE HUFNAGEL, A.B. (*Rutgers Univ.*) 1957, A.M. (*Colum-
 bia Univ.*) 1959.
 EDWARD MILES HUGHES, A.B. (*Wesleyan Univ.*) 1961.
 ROBERT NORMAN HYLAND, A.B. (*Northwestern Univ.*) 1960.
 ERIC STEVEN JACOBSON, A.B. (*Northwestern Univ.*) 1961.
 RICHARD ALLEN JAQUA, A.B. (*Yale Univ.*) 1960.
 MARTIN FREDERICK KAGNOFF.
 ROBERT LEWIS KANE, A.B. (*Columbia Univ.*) 1961.
 LEONARD HERMAN KAPELOVITZ, S.B. (*Univ. of Chicago*) 1961.
 CHARLES DICKSON KENYON, A.B. (*DePauw Univ.*) 1961.
 ALAN SHELLY KING, S.B. (*Juniata Coll.*) 1961.
 JOHN JOSEPH KONDON, JR., A.B. 1961.
 CHARLES JOSEPH KOPRIVA, A.B. (*State Univ. of South Dakota*) 1962,
 S.B. IN MED. (*ibid.*) 1963.
 LAURENCE JOEL KRENIS.
 KAREN EVELYN SIMPSON KUEHL, A.B. (*Swarthmore Coll.*) 1961.
 JOSEPH MICHAEL LANE, A.B. (*Columbia Univ.*) 1961.
 GRETCHEN LANGE, A.B. (*Radcliffe Coll.*) 1959.
 CHARLES SPENCER LANGSTON, A.B. 1961.
 ARTHUR LAWRENCE LEVIN, A.B. 1961.
 BARRY WILLIAM LEVINE, A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
 (*ibid.*) 1963.
 CHARLES RODGER MCCRAE, A.B. 1961.
 DAVID ANDREW MCKAY, S.B. (*Allegheny Coll.*) 1961.

HARVARD MEDICAL SCHOOL

- JOHN JOSEPH MCNAMARA, S.B. (*Boston Coll.*) 1961.
 JOHN STEPHENS MCREYNOLDS, A.B. (*Princeton Univ.*) 1960.
 ANDREW MALLORY, A.B. (*Amherst Coll.*) 1961.
 JOEL HAVES MANCHESTER, A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
 (*ibid.*) 1963.
 ROGER GREENWOOD MARK, S.B. (*Massachusetts Inst. of Technology*)
 1960.
 DONALD WESLEY MILLER, JR., A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
 (*ibid.*) 1963.
 CHARLES GALLOUPE MIXTER, 3D, S.B. (*Trinity Coll.*) 1961.
 KENNETH HOWARD MUELLER, S.B. (*Carroll Coll.*) 1961.
 GEORGE RICHARD NEELEY, A.B. (*Stanford Univ.*) 1961.
 JAMES ALONZO NELSON, A.B. 1961.
 DENNIS ERWIN NIEWOEHNER, A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
 (*ibid.*) 1963.
 SAMUEL GUY OBERLANDER, A.B. (*Hobart Coll.*) 1961.
 GARY EVAN POSER, A.B. (*Cornell Univ.*) 1961.
 MARCIA MUSSER QUEREAU, A.B. (*Vassar Coll.*) 1961.
 ARTHUR ELLIOTT REIDER, A.B. 1958.
 WALTER ANTHONY REILING, JR., S.B. (*Univ. of Dayton*) 1961.
 GEORGE GRANT RHOADS, A.B. (*Haverford Coll.*) 1961.
 EUGENE BARRY ROSENBERG, A.B. 1961.
 ALAN ANDREW ROZYCKI, A.B. (*Dartmouth Coll.*) 1961, B.MED.SCI.
 (*ibid.*) 1963.
 HENRY ERNEST SCHNIEWIND, JR., A.B. 1961.
 JAMES ALFRED SCHNUR, A.B. (*New York Univ.*) 1961.
 RICHARD HENRY SEDER, A.B. 1960.
 PAUL ANTON SHURIN, A.B. (*Brooklyn Coll.*) 1961.
 PETER JOSEPH SNYDER, A.B. (*Williams Coll.*) 1961.
 MAXIMILLIAN EDWARD STACHURA, A.B. (*Hamilton Coll.*) 1961.
 DAVID ELLIOTT STAGE, A.B. (*Yale Univ.*) 1961.
 PETER JOSEPH STEINGLASS, A.B. (*Union Coll.*) 1960.
 ROBERT ELLIOT STENSON, S.B. (*Massachusetts Inst. of Technology*) 1960.
 DOUGLAS KEITH STEWART, S.B. (*California Inst. of Technology*) 1961.
 MARK LAWRENCE STIGLITZ, A.B. (*Amherst Coll.*) 1961.
 JAMES WOODWARD WALLACE, B.MED.SCI. (*Dartmouth Coll.*) 1963.
 THADDEUS LUDWIG WANDEL, A.B. 1961.
 ALAN GARY WEINBERG, A.B., (*Dartmouth Coll.*) 1962, B.MED.SCI. (*ibid.*)
 1963.

DEGREES CONFERRED

LAURENCE ENGLER WOLF, A.B. 1961.

STEPHEN ANTHONY WOLFE, A.B. (*Dartmouth Coll.*) 1962, B.MED.SCI.
(*ibid.*) 1963.

PHILIP EARL YOUNG, A.B. (*Univ. of California at Los Angeles*) 1961.

M.D. cum laude for Thesis in a Special Field

NELSON ALLAN BURSTEIN, A.B. (*Oberlin Coll.*) 1961.

MAX HARRY COHEN, A.B. (*Columbia Univ.*) 1961.

RICHARD CORNELL, A.B. (*Bowdoin Coll.*) 1961.

CLYDE S CRUMPACKER, 2D, A.B. (*Cornell Univ.*) 1961.

ELLIOT SHELDON GERSHON, A.B. 1961.

M.D. cum laude

WILLIAM HARVEY BARRY, S.B. (*Yale Univ.*) 1961.

THOMAS SIEGMUND BODENHEIMER, A.B. 1961.

BRUCE ALLAN CHABNER, A.B. (*Yale Univ.*) 1961.

WILLIAM DEXTER CLARK, A.B. 1961.

WILLIAM GRIFFITH COUSER, A.B. 1961, B.MED.SCI. (*Dartmouth Coll.*)
1963.

RICHARD VINCENT CRONK, A.B. (*Univ. of Pennsylvania*) 1960.

HORST SIEGFRIED FILTZER, S.B. IN MED. (*Univ. of North Dakota*) 1963.

EDWARD BETTLE GILMORE, A.B. (*Wesleyan Univ.*) 1961.

HENRY PHILIP GODFREY, A.B. 1961.

MARC JOSEPH GURWITH, A.B. (*Yale Univ.*) 1961.

JOSEPH VALENTINE HAJEK, A.B. 1958.

JAMES EUGENE HUGHES, A.B. (*Dartmouth Coll.*) 1961, B.MED.SCI.
(*ibid.*) 1963.

HENRY BENFER KALTREIDER, A.B. 1960.

ROBERT ADRIAAN PIETER KARK, B.A. (*Univ. of Oxford*) 1962.

RICHARD ALVIN LOESCHER, A.B. (*DePauw Univ.*) 1961.

AMBROSE PATRICK McLAUGHLIN, 3D, A.B. (*Dartmouth Coll.*) 1961,
B.MED.SCI. (*ibid.*) 1963.

JEFFREY BRUCE RIKER, A.B. (*Columbia Univ.*) 1961.

MICHAEL STEVEN ROATH, A.B. (*Stanford Univ.*) 1961.

EDWARD MARK SCOLNICK, A.B. 1961.

JEFFREY ALAN STEIN, A.B. 1960.

MICHAEL MACCRACKEN STEWART, A.B. (*Princeton Univ.*) 1957.

RALPH WILLIAM STOLL, S.B. (*Univ. of California at Los Angeles*) 1958.

STANLEY HERMAN WISHNER, A.B. (*Franklin and Marshall Coll.*) 1961.

HARVARD MEDICAL SCHOOL

M.D. magna cum laude for Thesis in a Special Field

WALTER MICHAEL KUEHL, A.B. 1961.

WAYNE PAUL LONDON, A.B. (*Washington and Jefferson Coll.*) 1960.

CHARLES BRUCE SMITH, A.B. 1958.

M.D. magna cum laude

ROBERT STANLEY BERNSTEIN, A.B. (*Columbia Univ.*) 1961.

GEORGE UNDERWOOD FISHER, S.B. (*Wittenberg Univ.*) 1961.

ROBERT EDWARD GOLDSTEIN, A.B. 1961.

MARTIN LEE GREENE, A.B. 1961.

TERRY LANGER, A.B. (*New York Univ.*) 1961.

GILBERT STANLEY OMENN, A.B. (*Princeton Univ.*) 1961.

KENNETH ROY RATZAN, A.B. (*Amherst Coll.*) 1961.

RICHARD SELDEN, A.B. (*Northwestern Univ.*) 1961.

THOMAS WOODWARD SMITH, A.B. 1958.

INTERNSHIPS

CLASS OF JUNE 1965

Unless otherwise noted all internships started July 1, 1965
for one year.

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Aadalen, Richard J.	University Hospitals of Cleveland, Cleveland, Ohio	Surgery
Adams, H. Dan	Peter Bent Brigham Hospital, Boston	Surgery
Anderson, Larry S.	King County Hospital, Seattle, Wash.	Rotating
Avent, C. Kirk, 2d	University Hospital and Hillman Clinic, Birmingham, Ala.	Medicine
Babson, William W., Jr.	Medical College of Virginia, Rich- mond, Va.	Surgery
Baldwin, Stanley, S.	Peter Bent Brigham Hospital, Bos- ton	Surgery
Barry, William H.	Peter Bent Brigham Hospital, Bos- ton	Medicine
Beachley, Michael C.	Medical College of Virginia, Rich- mond, Va.	Surgery
Bernstein, Robert S.	Boston City Hospital (Harvard Service), Boston	Medicine
Bienfang, Don C.	Beth Israel Hospital, Boston	Medicine
Bisgard, Carl V., Jr.	King County Hospital, Seattle, Wash.	Rotating
Black, Ira B.	North Carolina Memorial Hospital Chapel Hill, N.C.	Medicine
Bodenheimer, Thomas S.	Boston City Hospital (Harvard Service), Boston	Medicine
Brisman, Ronald	Johns Hopkins Hospital, Baltimore, Md.	Surgery
Bunim, Lesley S.	Boston City Hospital, Boston	Pediatrics
Burstein, Nelson A.	Massachusetts General Hospital, Boston	Surgery
Carmody, John L.	Boston City Hospital (Harvard Service), Boston	Surgery

HARVARD MEDICAL SCHOOL

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Casella, Charles W.	San Francisco General Hospital, San Francisco, Calif.	Rotating
Chabner, Bruce A.	Peter Bent Brigham Hospital, Bos- ton	Medicine
Chally, Cecil H.	University of Minnesota Hospitals, Minneapolis, Minn.	Medicine
Clark, Daniel L.	Mary Fletcher Hospital, Burling- ton, Vt.	Rotating
Clark, William D.	King County Hospital, Seattle, Wash.	Medicine
Clermont, Gerald H.	Strong Memorial Hospital, Roches- ter, N.Y.	Surgery
Cohen, Edward M.	Bellevue Hospital (Columbia Serv- ice), New York, N.Y.	Mixed
Cohen, Max H.	Massachusetts General Hospital, Boston	Surgery
Cooke, J. Cary, 3d	Undecided	
Cornell, Richard	Buffalo General Hospital, Buffalo, N.Y.	Medicine
Couser, William G.	University of California Hospitals, San Francisco, Calif.	Medicine
Cox, Paul M., Jr.	Grady Memorial Hospital, Atlanta, Ga.	Medicine
Crespin, Stephen R.	University of Minnesota Hospitals, Minneapolis, Minn.	Medicine
Cronk, Richard V.	Peter Bent Brigham Hospital, Bos- ton	Surgery
Crumpacker, Clyde S, 2d	Boston City Hospital (Harvard Service), Boston	Medicine
Danielson, Kenneth S.	Strong Memorial Hospital, Roches- ter, N.Y.	Surgery
De Giacomo, Frank C.	Bellevue Hospital (New York Uni- versity Service), New York, N.Y.	Medicine
Denckla, W. Don- ner	New England Deaconess Hospital, Boston	Biochem- istry
Donahower, George F.	Cleveland Clinic Hospital, Clevel- and, Ohio	Mixed

INTERNSHIPS

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
DuBrow, Edward L.	Boston City Hospital (Boston University Service), Boston	Medicine
Dunkman, W. Bruce	University Hospitals of Cleveland, Cleveland, Ohio	Medicine
Farhad, Mina	Mount Auburn Hospital, Cambridge	Mixed
Feldman, Bruce A.	Hospital of the University of Pennsylvania, Philadelphia, Pa.	Rotating
Filtzer, Horst S.	Boston City Hospital (Harvard Service), Boston	Surgery
Fisher, George U.	Peter Bent Brigham Hospital, Boston	Medicine
Fisher, Thomas L.	Bronx Municipal Hospital Center, New York, N.Y.	Mixed
Gershon, Elliot S.	Mount Sinai Hospital, New York, N.Y.	Medicine
Gewirtz, George P.	Bellevue Hospital (Columbia Service), New York, N.Y.	Mixed
Gilmore, Edward B.	Massachusetts General Hospital, Boston	Medicine
Godfrey, Henry P.	Barnes Hospital, St. Louis, Mo.	Medicine
Goldstein, Robert E.	Bronx Municipal Hospital Center, New York, N.Y.	Medicine
Graham, Valerie A. L.	Undecided	
Greene, Martin L.	Massachusetts General Hospital, Boston	Medicine
Gurwith, Marc J.	Palo Alto-Stanford University Hospital Center, Palo Alto, Calif.	Medicine
Hajek, Joseph V.	Massachusetts General Hospital, Boston	Surgery
Hardy, Russell W., Jr.	Boston City Hospital (Harvard Service), Boston	Surgery
Haughie, Glenn E.	University Hospital, Seattle, Wash.	Medicine
Hollenberg, Robert D.	University Hospitals of Cleveland, Cleveland, Ohio	Surgery

HARVARD MEDICAL SCHOOL

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Hufnagel, Dorothy A.	Kings County Hospital Center, Brooklyn, N.Y.	Mixed
Hughes, Edward M.	Buffalo General Hospital, Buffalo, N.Y.	Medicine
Hughes, James E.	University of California Hospital, Los Angeles, Calif.	Medicine
Hyland, Robert N.	King County Hospital, Seattle, Wash.	Rotating
Jacobson, Eric S.	Los Angeles County General Hospital, Los Angeles, Calif.	Rotating
Jaqua, Richard A.	Massachusetts General Hospital, Boston	Pathology
Kagnoff, Martin F.	Peter Bent Brigham Hospital, Boston	Medicine
Kaltreider, H. Benfer	University Hospitals of Cleveland, Cleveland, Ohio	Medicine
Kane, Robert L.	University Hospital, Lexington, Ky.	Medicine
Kapelovitz, Leonard H.	Buffalo General Hospital, Buffalo, N.Y.	Medicine
Kark, R. A. Pieter	Boston City Hospital (Harvard Service), Boston	Medicine
Kenyon, Charles D.	Cincinnati General Hospital, Cincinnati, Ohio	Medicine
King, Alan S.	Buffalo General Hospital, Buffalo, N.Y.	Medicine
Kondon, John J., Jr.	University Hospital, Lexington, Ky.	Medicine
Kopriva, Charles J.	Mount Auburn Hospital, Cambridge	Mixed
Krenis, Laurence J.	Presbyterian Hospital, New York, N.Y.	Surgery
Kuehl, Karen E. S.	Cleveland Metropolitan General Hospital, Cleveland, Ohio	Pediatrics
Kuehl, W. Michael	Cleveland Metropolitan General Hospital, Cleveland, Ohio	Medicine
Lane, Joseph M.	Hospital of the University of Pennsylvania, Philadelphia, Pa.	Surgery

INTERNSHIPS

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Lange, Gretchen	Medical College of Virginia, Richmond, Va.	Surgery Mixed
Langer, Terry	Massachusetts General Hospital, Boston	Medicine
Langston, Charles S.	Boston City Hospital (Harvard Service), Boston	Medicine
Levin, Arthur L.	Boston City Hospital (Boston University Service), Boston	Pediatrics
Levine, Barry W.	Presbyterian-St. Luke's Hospital, Chicago, Ill.	Medicine
Loescher, Richard A.	Massachusetts General Hospital, Boston	Medicine
London, Wayne P.	Bronx Municipal Hospital Center, New York, N.Y.	Medicine
McCrae, Charles R.	Roosevelt Hospital, New York, N.Y.	Mixed
McKay, David A.	Buffalo General Hospital, Buffalo, N.Y.	Medicine
McLaughlin, Ambrose P., 3d	Massachusetts General Hospital, Boston	Surgery
McNamara, John J.	Vanderbilt University Hospital, Nashville, Tenn.	Medicine
McReynolds, John S.	Karolinska Institute, Stockholm, Sweden	Neuro-physiology
Mallory, Andrew	University of Minnesota Hospitals, Minneapolis, Minn.	Medicine
Manchester, Joel H.	University of Utah Affiliated Hospitals, Salt Lake City, Utah	Mixed
Mark, Roger G.	Boston City Hospital (Harvard Service), Boston	Medicine
Miller, Donald W., Jr.	Roosevelt Hospital, New York, N.Y.	Mixed
Mixer, Charles G., 3d	Massachusetts General Hospital, Boston	Surgery
Mueller, Kenneth H.	Cincinnati General Hospital, Cincinnati, Ohio	Pediatrics

HARVARD MEDICAL SCHOOL

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Neeley, G. Richard	University of Colorado Medical Center, Denver, Colo.	Surgery
Nelson, James A.	University of California Hospitals, San Francisco, Calif.	Surgery
Niewoehner, Dennis E.	University Hospitals of Cleveland, Cleveland, Ohio	Medicine
Oberlander, Samuel G.	Bronx Municipal Hospital Center, New York, N.Y.	Surgery
Omenn, Gilbert S.	Massachusetts General Hospital, Boston	Medicine
Poser, Gary E.	Presbyterian-St. Luke's Hospital, Chicago, Ill.	Medicine
Quereau, Marcia M.	Hospital of the University of Pennsylvania, Philadelphia, Pa.	Rotating
Ratzan, Kenneth R.	Presbyterian Hospital, New York, N.Y.	Medicine
Reider, Arthur E.	Mount Zion Hospital and Medical Center, San Francisco, Calif.	Mixed
Reiling, Walter A., Jr.	Boston City Hospital (Harvard Service), Boston	Surgery
Rhoads, George G.	Hospital of the University of Pennsylvania, Philadelphia, Pa.	Rotating
Riker, Jeffrey B.	Boston City Hospital (Harvard Service), Boston	Medicine
Roath, Michael S.	Los Angeles County General Hospital, Los Angeles, Calif.	Rotating
Rosenberg, Eugene B.	University of California Hospital, Los Angeles, Calif.	Medicine
Rozycki, Alan A.	Children's Hospital Medical Center, Boston	Pediatrics
Schniewind, Henry E., Jr.	Grady Memorial Hospital, Atlanta, Ga.	Medicine
Schnur, James A.	Beth Israel Hospital, Boston	Medicine
Scolnick, Edward M.	Massachusetts General Hospital, Boston	Medicine
Seder, Richard H.	Undecided	
Selden, Richard	Peter Bent Brigham Hospital, Boston	Medicine

INTERNSHIPS

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Shurin, Paul A.	Boston City Hospital, Boston	Pathology
Smith, Charles B.	Harvard Medical School, Boston	Pharmacology
Smith, Thomas W.	Massachusetts General Hospital, Boston	Medicine
Snyder, Peter J.	Beth Israel Hospital, Boston	Medicine
Stachura, Maximilian E.	Buffalo General Hospital, Buffalo, N.Y.	Medicine
Stage, David E.	University Hospital, Seattle, Wash.	Medicine
Stein, Jeffrey A.	Presbyterian Hospital, New York, N.Y.	Medicine
Steinglass, Peter J.	University of California Hospitals, San Francisco, Calif.	Pediatrics
Stenson, Robert E.	Beth Israel Hospital, Boston	Medicine
Stewart, Douglas K.	King County Hospital, Seattle, Wash.	Rotating
Stewart, Michael M.	Massachusetts General Hospital, Boston	Medicine
Stiglitz, Mark L.	University of California Hospital, Los Angeles, Calif.	Medicine
Stoll, Ralph W.	Peter Bent Brigham Hospital, Boston	Medicine
Wallace, James W.	Peter Bent Brigham Hospital, Boston	Surgery
Wandel, Thaddeus L.	Genesee Hospital, Rochester, N.Y.	Medicine
Weinberg, Alan G.	University Hospitals, Columbus, Ohio	Medicine
Wishner, Stanley H.	Presbyterian Hospital, New York, N.Y.	Medicine
Wolf, Laurence E.	Massachusetts General Hospital, Boston	Surgery
Wolfe, Stephen A.	University Hospitals of Cleveland, Cleveland, Ohio	Surgery
Young, Philip E.	King County Hospital, Seattle, Wash.	Surgery

Where the name of the state is omitted, the state is Massachusetts.

MEDICAL SCHOOL STUDENTS

FOURTH YEAR CLASS (1966)

- Akins, Carlton Manville, A.B. 1962. *Red Wing, Minn.*
 Alexander, William, A.B. (*Brandeis Univ.*) 1962. *White Plains, N. Y.*
 Appel, Eugene Leonard, B.M.E. (*Cornell Univ.*) 1962. *University Heights, Ohio*
 *Aronow, Abraham, S.B. (*Massachusetts Inst. of Technology*) 1962, B.MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. *New Haven, Conn.*
 Baker, Alan Robert, A.B. (*Bowdoin Coll.*) 1962. *Great Neck, N. Y.*
 Bauman, Dennis Jerry, A.B. (*Williams Coll.*) 1962. *Rochester, N. Y.*
 Beck, Laurence Holland, A.B. (*Amherst Coll.*) 1962. *Wilmington, Del.*
 Bell, Russell Sloan, A.B. (*Princeton Univ.*) 1961. *Hoopeston, Ill.*
 *Bergman, David Benjamin, A.B. (*Dartmouth Coll.*) 1962, B. MED. SCI. (*ibid.*) 1964. [Dartmouth Medical School]. *Great Neck, N.Y.*
 *Boulter, Philip Ross, A.B. (*Bowdoin Coll.*) 1962, B. MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. *Concord, N.H.*
 Bradley, Jane Elizabeth, A.B. (*Bryn Mawr Coll.*) 1962. *New York, N. Y.*
 Branda, Richard Frank, S.B. (*Univ. of Wisconsin*) 1962. *River Grove, Ill.*
 Breeden, Clara Jane, A.B. (*Stanford Univ.*) 1962. *El Cajon, Calif.*
 Brener, Bruce Jeffrey, A.B. (*Yale Univ.*) 1962. *Interlaken, N. J.*
 Brown, Stephen Morris, A.B. (*Princeton Univ.*) 1961. *Jamaica, N.Y.*
 Buchwald, Irwin Allan, A.B. (*Amherst Coll.*) 1962. *Brooklyn, N. Y.*
 Bunn, Jack Calvin, A.B. (*Duke Univ.*) 1959. *Annapolis, Md.*
 Carleton, William Michael, A.B. (*Yale Univ.*) 1962. *Providence, R. I.*
 Cassem, Edwin Hughes, A.B. (*St. Louis Univ.*) 1959, PH.L. (*ibid.*) 1960, A.M. (*ibid.*) 1961. *Omaha, Neb.*
 *Catlin, Brian, A.B. 1961, B. MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. *New York, N.Y.*

* Transferred to the third year class.

° Transferred to the second year class.

N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

STUDENTS

- *Christian, Roger Lawton, A.B. (*Middlebury Coll.*) 1961, B. MED. SCI.
 (*Dartmouth Coll.*) 1963. [Dartmouth Medical School].
West Orange, N.J.
- Cihak, Robert James, A.B. (*Univ. of Notre Dame*) 1962.
Yankton, S. Dak.
- *Clapp, Roger Wells, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*)
 1964. [Dartmouth Medical School]. Lynnfield
- *Colman, Gerald Byer, S.B. (*Tufts Univ.*) 1962, B. MED. SCI. (*Dart-*
mouth Coll.) 1964. [Dartmouth Medical School]. Attleboro.
- Crowell, Robert Morehead, A.B. (*Princeton Univ.*) 1962.
College Park, Md.
- Cutler, Bruce St. John, A.B. (*Princeton Univ.*) 1962. Newark, Del.
- Dale, David Chandler, S.B. (*Carson-Newman Coll.*) 1962. Atlanta, Ga.
- Daniels, Gilbert Harlan, S.B. (*Yale Univ.*) 1962. Malverne, N. Y.
- DeLong, Mahlon Robert, A.B. (*Stanford Univ.*) 1961. Balboa, Calif.
- *Edelson, Richard Nathan, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI.
 (*ibid.*) 1964. [Dartmouth Medical School]. Woodmere, N. Y.
- *Falchuk, Kenneth Herbert, A.B. (*Dartmouth Coll.*) 1962, B. MED. SCI.
 (*ibid.*) 1963. [Dartmouth Medical School]. Maracay, Venezuela
- *Federico, John Vincent, A.B. 1962, B. MED. SCI. (*Dartmouth Coll.*)
 1964. [Dartmouth Medical School]. Westerly, R. I.
- Finseth, Frederick James, A.B. (*Stanford Univ.*) 1962. Portland, Oregon
- Fletcher, Robert Hillman, A.B. (*Wesleyan Univ.*) 1962. Newtown, Pa.
- Fletcher, Suzanne Estelle Wright, A.B. (*Swarthmore Coll.*) 1962.
Keswick, Va
- *Fox, Howard James, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*)
 1964. [Dartmouth Medical School]. Dallas, Texas
- Friedman, Joel Paul, A.B. (*Princeton Univ.*) 1962. Palm Springs, Calif.
- Galin, Richard Safir, A.B. (*Univ. of Wisconsin*) 1962. Milwaukee, Wis.
- *Garren, Ronald Barton, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI.
 (*ibid.*) 1964. [Dartmouth Medical School]. Jamaica, N. Y.
- Gettelfinger, Thomas Clement, S.B. (*Univ. of Notre Dame*) 1962.
Louisville, Ky.
- Gilmour, David Pollock, S.B. (*Davidson Coll.*) 1962. Charlotte, N. C.
- Ginsberg, Myron David, A.B. (*Wesleyan Univ.*) 1961. Denver, Colo.
- Glass, Jonathan, S.B. (*Massachusetts Inst. of Technology*) 1962.
New Rochelle, N. Y.
- Glick, Thomas Harter Bachrach, A.B. 1961. Darien, Conn.
- Goetzl, Edward Joseph, A.B. (*Amherst Coll.*) 1962. Amherst

HARVARD MEDICAL SCHOOL

- Goldman, Thomas Carl, A.B. (*Cornell Univ.*) 1962. Brooklyn, N. Y.
 Gordon, James Harold, A.B. (*Williams Coll.*) 1962. Winchester
 Gottlieb, Jeffrey Arnold, A.B. (*Amherst Coll.*) 1962. Mount Vernon, N. Y.
 Grave, Gilman Drew, A.B. 1962. Rye, N. Y.
 Greenes, Robert Arthur, A.B. (*Univ. of Michigan*) 1962. University Heights, Ohio
 Guiney, Timothy Edward, S.B. (*Boston Coll.*) 1961. Canton
 Gunn, Robert Burns, S.B. (*Univ. of Michigan*) 1961. Washington, D. C.
 Hannah, Richard Jackson, A.B. (*Dartmouth Coll.*) 1962. Weston
 Hardman, George Lynn, A.B. 1962. Philadelphia, Pa.
 *Harley, Ned Richard, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (ibid.) 1964. [Dartmouth Medical School]. Detroit, Mich.
 Hatem, Charles Joseph, S.B. (*Boston Coll.*) 1962. Lawrence
 *Hawkins, Harold Berton, (*Yale Univ.*), B. MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. Oklahoma City, Okla.
 Hrehorovich, Victor Rostislav, A.B. 1962. Bronx, N. Y.
 Hughes, Edward Francis Xavier, A.B. (*Amherst Coll.*) 1962. Roslindale
 Ilfeld, Frederic William, Jr., A.B. (*Yale Univ.*) 1962. Beverly Hills, Calif.
 Jacobs, Edward Ellis, Jr., A.B. (*Princeton Univ.*) 1962. Buffalo, N. Y.
 Jurgeleit, Herbert Clement, A.B. (*Yale Univ.*) 1962. Townshend, Vt.
 *Kaldor, Richard Harvey, (*Univ. of North Dakota*), S.B. IN MED. (*Univ. of North Dakota*) 1964. [Univ. of North Dakota School of Medicine]. Mayville, N. Dak.
 Kaufman, Jay Henry, A.B. (*Princeton Univ.*) 1962. Rockville Centre, N. Y.
 Kern, Michael Lee, A.B. (*Yale Univ.*) 1962. Cincinnati, Ohio
 *Knab, Richard Emil, A.B. (*Coll. of the Holy Cross*) 1962, B. MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. Whippany, N. J.
 Koops, Herbert John, S.B. (*United States Military Academy*) 1957. Ridgewood, N. Y.
 Koran, Lorrin Michael, A.B. 1962. Los Angeles, Calif.
 Krainin, James Mark, A.B. 1962. New York, N. Y.
 Krant, David Alan, A.B. 1962. Atlanta, Ga.
 Leary, Joan Marie, A.B. (*Mt. Holyoke Coll.*) 1962. Roslindale

STUDENTS

- °Levine, Melvin David, A.B. (*Brown Univ.*) 1961. [Oxford Univ. Medical School]. *New York, N.Y.*
- Levine, Norman Steven, A.B. (*Princeton Univ.*) 1962. *Paterson, N. J.*
- Levisohn, Steven Ralph, A.B. 1962. *Denver, Colo.*
- *Loew, Donald Earl, A.B. (*Brown Univ.*) 1959, B. MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. *Newtonville*
- Ludden, John Marten, A.B. 1962. *Milwaukee, Wis.*
- *McGillicuddy, John Eugene, S.B. (*Coll. of the Holy Cross*) 1962, B. MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. *Ashland*
- *McInerny, Thomas Kevin, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*) 1964. [Dartmouth Medical School]. *Crestwood, N. Y.*
- McNeil, Barbara Joyce, A.B. (*Emmanuel Coll.*) 1962. *Dorchester*
- *McNutt, Neil Scott, S.B. (*Univ. of Arizona*) 1961, S.M. (*ibid.*) 1962. [Division of Medical Sciences, Harvard Univ.] *Tucson, Ariz.*
- Marmor, Michael Franklin, A.B. 1962. *Los Angeles, Calif.*
- Mendelsohn, George Emanuel, A.B. 1962. *Alton, Ill.*
- Micheli, Lyle Joseph, A.B. 1962. *Peru, Ill.*
- Mills, John, S.B. (*Univ. of Chicago*) 1961. *Rochester, N. Y.*
- Mogielnicki, Robert Peter, A.B. (*Cornell Univ.*) 1962. *Hartford, Conn.*
- *Mohit, Roberta Huberman, A.B. (*Cornell Univ.*) 1962. [New York Univ. School of Medicine]. *Brooklyn, N. Y.*
- Monath, Thomas Patrick Charles, A.B. 1962. *Hewlett Harbor, N. Y.*
- Nasr, Hooshang, A.B. (*Yale Univ.*) 1962. *Tehran, Iran*
- Neisuler, Ross Francis, A.B. 1962. *Schenectady, N. Y.*
- Nelson, John Paul, A.B. (*Univ. of Notre Dame*) 1962. *Breckenridge, Minn.*
- Nelson, Scott Haviland, A.B. (*Yale Univ.*) 1962. *Colorado Springs, Colo.*
- *Olsen, George Duane, A.B. (*Dartmouth Coll.*) 1962, B. MED. SCI. (*ibid.*) 1964. [Dartmouth Medical School]. *Cortland, Ill.*
- Oren, Mark Edward, A.B. (*Cornell Univ.*) 1962. *Catskill, N. Y.*
- Owen, Robert Leo, A.B. (*Univ. of Oklahoma*) 1962. *Bartlesville, Okla.*
- *Parker, George Warren, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*) 1964. [Dartmouth Medical School]. *Newton*
- Payne, Douglas DeFrees, A.B. 1962. *Dayton, Ohio*
- Pidot, Anne Louise Rassiga, A.B. (*Bryn Mawr Coll.*) 1962. *Long Beach, N. Y.*
- Pincus, Theodore Paul, A.B. (*Columbia Univ.*) 1961. *New York, N. Y.*

HARVARD MEDICAL SCHOOL

- Pine, Michael Boehmer, A.B. (*Brandeis Univ.*) 1962. *New York, N. Y.*
 Pipkin, Robert Donald, A.B. (*Regis Coll.*) 1962. *Denver, Colo.*
 Pollock, Edward Jay, A.B. (*Northwestern Univ.*) 1961. *Skokie, Ill.*
 Poole, Thomas Allen, A.B. (*Univ. of Pennsylvania*) 1962. *Port Allegany, Pa.*
 *Prager, Elliot David, A.B. (*Dartmouth Coll.*) 1962, B. MED. SCI. (*ibid.*)
 1964. [*Dartmouth Medical School*]. *Brooklyn, N. Y.*
 Proskauer, Stephen, A.B. 1962. *Brookline*
 Ravenscroft, Kent, Jr., A.B. (*Yale Univ.*) 1962. *St. Louis, Mo.*
 Reckler, Jon Michael, A.B. 1962. *Denver, Colo.*
 *Rie, Michael Allan, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*)
 1964. [*Dartmouth Medical School*]. *Jamaica, N. Y.*
 Roglieri, John Louis, S.B. (*Lehigh Univ.*) 1960. *Scotch Plains, N. J.*
 Roots, Logan Herbert, A.B. (*Hamilton Coll.*) 1961. *White Plains, N. Y.*
 Roth, Loren Henry, A.B. (*Cornell Univ.*) 1961. *Shaker Heights, Ohio*
 Rothenberg, Richard Bernard, A.B. (*Columbia Univ.*) 1962. *Jamaica, N. Y.*
 Rubin, Robert Harold, A.B. (*Williams Coll.*) 1962. *West Hartford, Conn.*
 Scharff, David Edward, A.B. (*Yale Univ.*) 1962. *St. Louis, Mo.*
 Schoenbaum, Stephen Carl, A.B. (*Swarthmore Coll.*) 1962. *Medford*
 Scholand, Joseph Francis, A.B. (*St. John Fisher Coll.*) 1962. *Spencerport, N. Y.*
 Schott, John William, A.B. (*Johns Hopkins Univ.*) 1962. *LaSalle, Ill.*
 Schulman, Joseph Daniel, A.B. (*Brooklyn Coll. of The City Univ. of*
New York) 1962. *Brooklyn, N. Y.*
 Shipley, William Upjohn, A.B. (*Yale Univ.*) 1962. *Norton*
 *Shumaker, Jay Barry, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI.
 (*ibid.*) 1964. [*Dartmouth Medical School*]. *Southfield, Mich.*
 Siegel, Robert Charles, A.B. (*Princeton Univ.*) 1962. *Kingston, Pa.*
 *Sigman, Robert Lewis, A.B. (*Hobart Coll.*) 1962, B. MED. SCI. (*Dart-*
mouth Coll.) 1964. [*Dartmouth Medical School*]. *Jersey City, N. J.*
 Smith, Richard Wilbur, A.B. 1962. *Rochester, N. Y.*
 Sox, Harold Carleton, Jr., S.B. (*Stanford Univ.*) 1961. *Atherton, Calif.*
 Steinberg, Alfred David, A.B. (*Princeton Univ.*) 1962. *Great Neck, N. Y.*
 Stevenson, John Eric, A.B. (*St. Olaf Coll.*) 1962. *Viroqua, Wis.*
 Strober, Samuel, A.B. (*Columbia Univ.*) 1961. *Brooklyn, N. Y.*

STUDENTS

- Strong, Steven Roger, s.B. (*Union Coll.*) 1962. *Schenectady, N. Y.*
 Stubblefield, Phillip George, A.B. 1962. *Liberal, Kans.*
 Sun, Andrew Suian On, s.B. (*Univ. of California*) 1961. *San Francisco, Calif.*
 Sweetland, Ralph Coburn, A.B. 1962. *Cambridge*
 Swett, Chester Parker, Jr., s.B. (*Denison Univ.*) 1961. *Lancaster, Ohio*
 *Taylor, Phillip Harding, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI.
 (*ibid.*) 1964. [Dartmouth Medical School]. *Elkins, N. H.*
 Teichholz, Louis Evan, A.B. 1962. *Passaic, N. J.*
 Torop, Paul, A.B. (*Yale Univ.*) 1962. *Yonkers, N. Y.*
 Trelstad, Robert Laurence, A.B. (*Columbia Univ.*) 1961. *Salem, Oregon*
 Ullyot, Joan Wingate Lamb, A.B. (*Wellesley Coll.*) 1961. *Concord*
 Wegman, David Howe (*Swarthmore Coll.*) *Ann Arbor, Mich.*
 Weiner, Michael Samuel, A.B. 1962. *Williamsville, N. Y.*
 Weintraub, Bruce Dale, A.B. (*Princeton Univ.*) 1962. *Buffalo, N. Y.*
 *Welsh, George Franklin, A.B. (*Carleton Coll.*) 1962. S.B. IN MED.
 (*Univ. of North Dakota*) 1964. [Univ. of North Dakota School
 of Medicine]. *Bismark, N. Dak.*
 *Weymuller, Ernest Alfred, Jr., A.B. (*Dartmouth Coll.*) 1962, B. MED.
 SCI. (*ibid.*) 1964. [Dartmouth Medical School]. *Manhasset, N. Y.*
 Winig, Paul Ira, A.B. 1962. *Trenton, N. J.*
 Wood, William Costin, s.B. (*Wheaton Coll.*) 1962. *Charlotte, N. C.*
 Young, Dean Francis, A.B. (*Kenyon Coll.*) 1962. *Dayton, Ohio*

THIRD YEAR CLASS (1967)

- Aaron, Robert Steven, A.B. (*Columbia Univ.*) 1963. *Teaneck, N.J.*
 *Adelekan, Adetunji, s.B. (*Ohio State Univ.*) 1963, B. MED. SCI. (*Dart-*
 mouth Coll.) 1965. [Dartmouth Medical School]. *Lagos, Nigeria*
 Asher, John David, A.B. 1961. *Ithaca, N.Y.*
 Axelrod, Lloyd, A.B. (*Princeton Univ.*) 1963. *New York, N.Y.*
 Bagley, Charles Miller, Jr., A.B. (*Carleton Coll.*) 1963. *Duluth, Minn.*
 Ballantine, Thomas Van Ness, A.B. (*Princeton Univ.*) 1963. *Boston*
 *Bayard, Edward Quint, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*)
 1965. [Dartmouth Medical School]. *Newton*

‡ Admitted on the basis of three years' college work.

° Transferred to the second year class.

* Transferred to the third year class.

† Degree conferred by Harvard University.

N.B. Where the college name is omitted, the college is Harvard; where
 the state is omitted, the state is Massachusetts.

HARVARD MEDICAL SCHOOL

- Berc, Kenneth Myles, A.B. (*Colgate Univ.*) 1963. Roslyn, N.Y.
 Bernet, Francis William, A.B. (*Coll. of the Holy Cross*) 1963. Marblehead
 Bissell, Dwight Montgomery, Jr., A.B. 1962. Saratoga, Calif.
 Bleiberg, Mona Louise, A.B. (*Univ. of Chicago*) 1963. Maplewood, N.J.
 Bonnar, James Millar, 3d, A.B. 1963. Middleboro
 Brauner, Gary Jules, A.B. (*Yale Univ.*) 1963. Fairfield, Conn.
 Bucknall, William Eric, A.B. (*Univ. of Texas*) 1963. Austin, Texas
 Burgess, Joan Tucker, A.B. (*Oberlin Coll.*) 1963. Warren, R.I.
 *Carolan, Robert Mills, A.B. (*Coll. of the Holy Cross*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. Norwood
 Chesebro, Bruce Wilcox, S.B. (*California Inst. of Technology*) 1963. Los Angeles, Calif.
 *Christensen, William Ivor, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. Denver, Colo.
 Chused, Judith Ann Fingert, A.B. (*Wellesley Coll.*) 1963. St. Louis, Mo.
 *Chused, Thomas Morton, A.B. 1962. [New York Univ. School of Medicine]. St. Louis, Mo.
 Conger, Seymour Beach, A.B. (*Amherst Coll.*) 1963. Pleasantville, N.Y.
 Daniel, Alan, A.B. (*Amherst Coll.*) 1963. New York, N.Y.
 Desser, Richard Kenneth, A.B. (*Univ. of California, Berkeley*) 1963. Chicago, Ill.
 Diamond, Richard Donald, A.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. Brooklyn, N.Y.
 Dolin, Raphael, A.B. 1963. Allen Park, Mich.
 Donahue, Valentina Elizabeth Clark, A.B. (*Barnard Coll.*) 1962. Brooklyn, N.Y.
 Dorman, John Merrill, A.B. (*Williams Coll.*) 1963. Pittsfield
 Dorner, Douglas Bloom, A.B. (*Amherst Coll.*) 1963. Des Moines, Iowa
 *Dunham, Tom Robert, A.B. (*Willamette Univ.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. Salem, Oregon
 °Dushman, Miriam Bonita, A.B. (*Barnard Coll.*) 1959, S.M. (*Massachusetts Inst. of Technology*) 1964. [Columbia Univ. of Coll. of Physicians and Surgeons]. Bronx, N.Y.
 Eagleton, Lanie Earl, A.B. (*Hamilton Coll.*) 1963. Olney, Ill.
 Ellman, Leonard Lloyd, A.B. 1963. Brooklyn, N.Y.

STUDENTS

- Erdmann, Albert John, 3d, A.B. 1963. *New York, N.Y.*
- *Falchuk, Zalman Myron, (*Dartmouth Coll.*) B. MED. SCI. (*ibid.*) 1965.
[*Dartmouth Medical School*]. *Maracay, Venezuela*
- Finseth, Katherine Frances Alden, A.B.† (*Radcliffe Coll.*) 1963.
Cleveland, Ohio
- *Fischer, John Robert, A.B. (*Dartmouth Coll.*) 1963, S.B. IN MED. (*Univ. of North Dakota*) 1965. [*Univ. of North Dakota School of Medicine*]. *Minot, N. Dak.*
- *Floyd, Richard Paul, A.B. (*Middlebury Coll.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [*Dartmouth Medical School*]. *Weston*
- Funkenstein, Herrman Harris, A.B. (*Princeton Univ.*) 1961; B.A. (*Univ. of Oxford*) 1963. *Boston*
- ‡Galton, Virginia Renée. (*Univ. of Rochester*) *New York, N.Y.*
- Gardner, Laurence Bernard, S.B. (*Massachusetts Inst. of Technology*) 1963. *Lynbrook, N.Y.*
- *Garibaldi, Richard Alfred, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [*Dartmouth Medical School*]. *West Roxbury*
- Gelb, Lawrence David, S.B. (*Univ of Michigan*) 1963. *Detroit, Mich.*
- ‡Goldsmith, Philip Lawrence, A.B. (*Cornell Univ.*) 1964. *New York, N.Y.*
- Goldstein, Stanton Philip, A.B. 1963. *Ossining, N.Y.*
- Gordon, James Samuel, A.B. 1962. *New York, N.Y.*
- Gorelick, Kenneth Paul, A.B. (*Rutgers Univ.*) 1962. *Paterson, N.J.*
- Greene, Andrew Frank, A.B. (*Amherst Coll.*) 1963. *Cincinnati, Ohio*
- *Griffin, Walter Joseph, Jr., A.B. (*Coll. of the Holy Cross*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [*Dartmouth Medical School*]. *Worcester*
- *Gunderson, John Gunder, (*Johns Hopkins Univ.*), B. MED. SCI. (*Dartmouth Coll.*) 1965. [*Dartmouth Medical School*]. *Oshkosh, Wis.*
- Gustafson, James Paul, A.B. 1963. *Saginaw, Mich.*
- Gutheil, Thomas Gordon, A.B. 1963. *New York, N.Y.*
- Hayes, Charles Robert, A.B. (*Yale Univ.*) 1962. *Keytesville, Mo.*
- Hirschfeld, David Seth, A.B. 1963. *Woods Hole*
- Holmes, Robert Henry, A.B. (*Amherst Coll.*) 1963. *Denver, Colo.*
- Holt, William Steven, S.B. (*Bates Coll.*) 1963. *Waterville, Maine*
- *Horwich, Mark Stephen, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*) 1965. [*Dartmouth Medical School*]. *Denver, Colo.*
- Hurwitz, Alfred Lewis, A.B. 1963. *Brookline*
- Irwin, Robert Joseph, A.B. (*Denison Univ.*) 1963. *Cleveland, Ohio*

HARVARD MEDICAL SCHOOL

- *Jarrett, Fredric, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Newton Centre*
- Jencks, Stephen Francis, A.B. 1962. *Towson, Md.*
- Johnson, Burt Powers, A.B. 1962. *Ardsley, N.Y.*
- *Johnson, David Gregory, A.B. (*Yale Univ.*) 1962, B. MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. *Belvidere, Ill.*
- Joseph, Neil Howard, S.B. (*Union Coll.*) 1961. *East Quogue, N.Y.*
- Kadish, Anna Stein, A.B. (*Barnard Coll.*) 1963. *New York, N.Y.*
- Kadish, Lawrence Jerome, A.B. (*Princeton Univ.*) 1963. *West Orange, N.J.*
- Kahn, James Brodie, A.B. 1963. *Manchester, N.H.*
- Kahn, Jesse Lewis, A.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N.Y.*
- Kempczinski, Richard Francis, A.B. (*Coll. of the Holy Cross*) 1962. *Brooklyn, N.Y.*
- Knopf, Harry Louis Safir, A.B. 1963. *Trenton, N.J.*
- Korshin, Oliver Marc, A.B. (*St. John's Coll., Maryland*) 1963. *Whitestone, N.Y.*
- Kourides, Ione Anne, A.B. (*Wellesley Coll.*) 1963. *Forest Hills, N.Y.*
- Kumpe, David Allen, A.B. (*Oberlin Coll.*) 1963. *Covington, Ky.*
- Kupor, Lary Richard, S.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N.Y.*
- Landrigan, Philip John, A.B. (*Boston Coll.*) 1963. *West Roxbury*
- *Latty, Alexander Basil, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Yarmouth, Maine*
- Lazar, Gerald Kenneth, A.B. (*Brooklyn Coll. of The City of New York*) 1963. *Brooklyn, N.Y.*
- Levine, Stanley Bryant, S.B. (*Tufts Univ.*) 1963. *Denver, Colo.*
- Lewinnek, George Eric, A.B. (*Carleton Coll.*) 1963. *Merrill, Wis.*
- *Liggio, Raymond, A.B. (*Yale Univ.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Jackson Heights, N.Y.*
- Lisanti, Michael Joseph, A.B. (*Cornell Univ.*) 1963. *Brooklyn, N.Y.*
- Loewenstein, Matthew Samuel, S.B. (*Union Coll.*) 1962. *Forest Hills, N.Y.*
- Mabogunje, Oluwatope Abimbola, A.B. (*Brandeis Univ.*) 1963. *Ibadan, Nigeria*
- *McAlary, Brian Gerard, A.B. (*Colby Coll.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Waterville, Maine*

STUDENTS

- MacDougal, Bruce Albert, A.B. (*Williams Coll.*) 1963. Bangor, Maine
- *McGowan, John Edward, Jr., (*Providence Coll.*), B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. Garden City, N.Y.
- *McLennan, James Edward, S.B. (*Stanford Univ.*) 1962. [Stanford Univ. School of Medicine]. Palo Alto, Calif.
- *Mahnke, Mark William, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. Walla Walla, Wash.
- Malter, Ira Joel, A.B. (*Columbia Univ.*) 1963. Riverdale, N.Y.
- Mark, Eugene Jerome, A.B. (*Oberlin Coll.*) 1962. Kent, Ohio
- Mastroianni, Nicholas Anthony, Jr., A.B. 1962. Hopedale
- Meissner, William Walter, A.B. (*St. Louis Univ.*) 1956; A.M. (*ibid.*) 1957; PH.L. (*ibid.*) 1957; S.T.B. (*Woodstock Coll.*) 1960; S.T.L. (*ibid.*) 1962. Buffalo, N.Y.
- Mills, Roberta Ann, S.B. (*Allegheny Coll.*) 1963. St. Albans, W. Va.
- Mitch, William Evans, 2d, A.B. 1963. Birmingham, Ala.
- Molinoff, Perry Brown, A.B. 1962. Smithtown, N.Y.
- *Mooney, Peter Bryan, A.B. (*Univ. of New Hampshire*) 1959, S.M. (*ibid.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. Belmont, N.H.
- Morris, Ira Alan, A.B. (*Boston Univ.*) 1963. Cambridge
- Morrison, Peter Nelson, A.B. (*Columbia Univ.*) 1963. Great Neck, N.Y.
- *Muroff, Lawrence Ross, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. Broomall, Pa.
- Murphy, William Mont, A.B. (*Drake Univ.*) 1963. Des Moines, Iowa
- Murray, Michael John, A.B. (*State Univ. of Iowa*) 1963. Logan, Iowa
- Newhouse, Jeffrey Hooker, A.B. (*Princeton Univ.*) 1963. Upper Nyack, N.Y.
- Ogunye, Medrose Olu, A.B. (*Western Reserve Univ.*) 1963. Ondo, Nigeria
- O'Neill, Daniel Patrick, S.B. (*Massachusetts Inst. of Technology*) 1963. Roslindale
- Pasternak, Derick Peter, A.B. 1963. New York, N.Y.
- Phillips, Lawrence Stone, A.B. (*Swarthmore Coll.*) 1963. Washington, D.C.
- Pitts, William Reid, Jr., A.B. (*Princeton Univ.*) 1963. Charlotte, N.C.
- *Pressman, Barry David, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. Brooklyn, N.Y.
- Putnoi, Donald William, A.B. (*Columbia Univ.*) 1963. Brooklyn, N.Y.

HARVARD MEDICAL SCHOOL

- *Ram, Meryl Henry, (*Cornell Univ.*), B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. Caldwell, N.J.
- *Reigart, John Routt, 2d, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. Charleston, S.C.
- Reiling, Richard Bernard, S.B. (*Univ. of Dayton*) 1963. Dayton, Ohio
- *Reilly, Frank Eugene, A.B. (*Coll. of the Holy Cross*) 1960, A.M. (*Univ. of Wisconsin*) 1961, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. New York, N.Y.
- Rogell, Gerald David, A.B. 1963. Newton Centre
- Rohde, Jon Eliot, A.B. (*Amherst Coll.*) 1963. Barrington, R.I.
- Roth, Gerald James, A.B. 1963. Mankato, Minn.
- Ruberg, Robert Lionel, A.B. (*Haverford Coll.*) 1963. Philadelphia, Pa.
- Saxbe, William Bart, Jr., A.B. (*Amherst Coll.*) 1963. Mechanicsburg, Ohio
- Schantz, Arthur Stephen, S.B. (*Massachusetts Inst. of Technology*) 1963. Brooklyn, N.Y.
- Schnitker, Paul Clayton, A.B. (*Yale Univ.*) 1963. Toledo, Ohio
- Schoolwerth, Anton Cornelis, A.B. (*Princeton Univ.*) 1963. Glen Ellyn, Ill.
- *Schuler, John Gordon, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. Newton Centre
- *Segel, William Dana, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. Brookline
- *Sewall, Warren, S.B. (*Massachusetts Inst. of Technology*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. West Hartford, Conn.
- Shapiro, Daniel William, S.B. (*Massachusetts Inst. of Technology*) 1963. New York, N.Y.
- Shenkin, Budd Norman, A.B. 1963. Wynnwood, Pa.
- Sherwood, Michael Ralph, A.B. (*Princeton Univ.*) 1960, DR. PHIL. (*Univ. of Oxford*) 1965. Milwaukee, Wis.
- Shulman, Richard Stanley, A.B. 1963. Swampscott
- Siegel, Arthur Jay, A.B. (*Swarthmore Coll.*) 1962. Bal Harbour, Fla.
- Silver, David Jay, A.B. (*Amherst Coll.*) 1963. Bristol, Conn.
- Simmons, Michael Anthony, A.B. 1963. Fort Wayne, Ind.
- Simon, Harvey Bruce, A.B. (*Yale Univ.*) 1963. Fort Lauderdale, Fla.
- Singer, Karl Lawrence, A.B. 1963. Huntington Woods, Mich.
- *Sites, Vincent Raymond, A.B. (*Johns Hopkins Univ.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. Miami, Fla.

STUDENTS

- Smith, Donald Angehr, A.B. 1963. *Little Rock, Ark.*
 Smith, Douglas Grant, A.B. (*Pomona Coll.*) 1963. *San Marino, Calif.*
 Sommer, Alfred, S.B. (*Union Coll.*) 1963. *Jamaica, N.Y.*
 *Stein, Stephen Alan, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*)
 1965. [*Dartmouth Medical School*]. *Waterbury, Conn.*
 Stossel, Thomas Peter, A.B. (*Princeton Univ.*) 1963. *Wilmette, Ill.*
 Sugihara, Jared Genji, A.B. (*Yale Univ.*) 1963. *Honolulu, Hawaii*
 Walker, Pamela Pauline, A.B.† (*Radcliffe Coll.*) 1963. *Montclair, N.J.*
 Weiden, Paul Lincoln, A.B. 1963. *Atherton, Calif.*
 Weikel, Anthony Monroe, S.B. (*Massachusetts Inst. of Technology*)
 1963. *Lathrop Village, Mich.*
 Weinerth, John Louis, S.B. (*Bucknell Univ.*) 1963. *Easton, Pa.*
 Weir, Gordon Campbell, A.B. (*Dartmouth Coll.*) 1963.
Cleveland Heights, Ohio
 Wesley, John Robert, A.B. 1963. *Ann Arbor, Mich.*
 *White, Eric Shaw, S.B. (*Yale Univ.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [*Dartmouth Medical School*]. *Winchendon Springs*
 *Winterer, Joerg Constantine, A.B. (*Haverford Coll.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [*Dartmouth Medical School*].
Northampton
 *Wise, Jonathan Kurland, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*)
 1965. [*Dartmouth Medical School*]. *Haverhill*
 *Wolf, Gerald Lee, S.B. IN MED. (*Univ. of Nebraska*) 1962, S.M. (*ibid.*)
 1964, PH.D. (*ibid.*) 1965. [*Univ. of Nebraska Coll. of Medicine*].
Sidney, Nebr.
 Wolman, Carol Stone, A.B. (*Radcliffe Coll.*) 1962. *Philadelphia, Pa.*
 *Wright, Peter Farnum, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [*Dartmouth Medical School*]. *New York, N.Y.*
 Zaentz, Samuel Donald, A.B. (*Williams Coll.*) 1963. *Clifton, N.J.*

SECOND YEAR CLASS (1968)

- Adair, Richard Franklin, A.B. 1964. *St. Paul, Minn.*
 Alpert, Joseph Stephen, A.B. (*Yale Univ.*) 1963. *New Haven, Conn.*
 Anderson, Einar Wulfsberg, A.B. (*Stanford Univ.*) 1963.
Arcadia, Calif.

‡ Admitted on the basis of three years' college work.

° Transferred to the second year class.

† Degree conferred by Harvard University.

N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

HARVARD MEDICAL SCHOOL

- Arradondo, John El Roy, A.B. (*Oklahoma City Univ.*) 1963. Altus, Okla.
- Baron, Deborah Lois, A.B.† (*Radcliffe Coll.*) 1964. Brookline
- Bennett, William Ira, A.B. 1962. Tacoma, Wash.
- Bialer, Rishon Menahem, A.B. (*Brandeis Univ.*) 1964. Paterson, N.J.
- Bissell, John Albert, A.B. (*Stanford Univ.*) 1964. Saratoga, Calif.
- Boylston, Arthur William, 2d, A.B. (*Yale Univ.*) 1964. Portland, Oregon
- Brandt, John Henry, A.B. (*Yale Univ.*) 1962. Lakewood, Ohio
- Breslow, Jan Leslie, A.B. (*Columbia Univ.*) 1963, A.M. (*ibid.*) 1964. Brooklyn, N.Y.
- Brier, Arnold Michael, A.B. (*Univ. of Chicago*) 1964. Dayton, Ohio
- Brownstein, Carlton Stewart, A.B. (*Williams Coll.*) 1964. Baldwin, N.Y.
- Burdick, James Frederick, S.B. (*Yale Univ.*) 1964. Alfred, N.Y.
- Cannon, Walter Bradford, A.B. 1963. Lincoln
- Chen, Lincoln Chih-ho, A.B. (*Princeton Univ.*) 1964. New York, N.Y.
- Chivian, Eric Seth, A.B. 1964. Millburn, N.J.
- Cohen, Michael Victor, A.B. 1964. New York, N.Y.
- Colvin, Robert Barnes, S.B. (*Massachusetts Inst. of Technology*) 1964. St. Charles, Mo.
- Dolgoft, Robert Kenneth, A.B. 1964. Topeka, Kans.
- Droller, Michael Jack, A.B. 1964. Brooklyn, N.Y.
- Eisen, Howard Jay, A.B. 1964. Miami, Fla.
- Ellsworth, George Avery, A.B. (*Kansas State Univ.*) 1965. Manhattan, Kans.
- Fielding, Jonathan Evan, A.B. (*Williams Coll.*) 1964. Mamaroneck, N.Y.
- Fisher, Judith Kathleen, A.B.† (*Radcliffe Coll.*) 1964. New York, N.Y.
- Fisher, Morris Alan, A.B. (*Yale Univ.*) 1961. New York, N.Y.
- Frederick, Robert Arthur, S.B. (*Georgetown Univ.*) 1964. West Orange, N.J.
- Friedlander, Barbara Colette, A.B. (*Barnard Coll.*) 1964. New York, N.Y.
- Friedman, Paul Aaron, A.B. (*Princeton Univ.*) 1964. Baltimore, Md.
- Funkenstein, Daniel Louis, A.B. (*Princeton Univ.*) 1964. Boston
- Furlong, Maurice Bennett, Jr., A.B. (*Fordham Univ.*) 1964. Jamestown, N.Y.

STUDENTS

- °Garrison, Henry Byron, S.B. (*Yale Univ.*) 1962, B.A. (*Univ. of Oxford*) 1965. [Oxford Univ. Medical School]. Coral Gables, Fla.
- Goldberg, Alfred Lewis, A.B. 1963. Providence, R.I.
- Goldberg, George Ansbach, A.B. 1963. Mount Vernon, N.Y.
- Goldberg, Michael Ellis, A.B. 1963. Eastchester, N.Y.
- Goldenson, Ronald Hugh, A.B. (*Princeton Univ.*) 1964. Harrison, N.Y.
- Gottdiener, Donna, A.B. (*Wellesley Coll.*) 1963. Poughkeepsie, N.Y.
- Gradman, Wayne Stuart, A.B. (*Univ. of Chicago*) 1964. Skokie, Ill.
- Grana, William Anthony, A.B. 1964. St. Louis, Mo.
- Guss, Stephen Bernard, A.B. (*Yale Univ.*) 1964. Omaha, Nebr.
- Hadler, Nortin Marvin, A.B. (*Yale Univ.*) 1964. Eastchester, N.Y.
- Hanson, Charles William Davenport, Jr., A.B. 1964. New York, N.Y.
- Hawk, Alan Brainard, A.B. (*Amherst Coll.*) 1964. Pittsburgh, Pa.
- Hejinian, John Paull, A.B. 1962. New York, N.Y.
- Herbert, Marshall Linton, A.B. (*Wesleyan Univ.*) 1964. Gainesville, Fla.
- Herman, Judith Lewis, A.B.† (*Radcliffe Coll.*) 1964. New York, N.Y.
- Heuser, John Edward, A.B. 1964. Tulsa, Okla.
- Hochschuler, Stephen Howard, A.B. (*Columbia Univ.*) 1964. Forest Hills, N.Y.
- Holloran, James Francis, Jr., A.B. (*Coll. of the Holy Cross*) 1964. Washington, D.C.
- Hurwitz, Barbara Mara, A.B. (*Bryn Mawr Coll.*) 1964. New Rochelle, N.Y.
- Jacobs, Paul Samuel, A.B. 1964. Lakewood, Calif.
- Jakobiec, Frederick Albert, A.B. 1964. Manchester, N.H.
- Kahn, Henry Slater, A.B. 1964. Poughkeepsie, N.Y.
- Kelley, Jonathan Merrick, A.B. (*Princeton Univ.*) 1961. West Newton
- °King, Robert Alan, A.B. (*Cornell Univ.*) 1963, B.A. (*Univ. of Oxford*) 1965. [Oxford Univ. Medical School]. Oak Park, Ill.
- Kluft, Richard Philip, A.B. (*Princeton Univ.*) 1964. Perth Amboy, N.J.
- Kolonel, Laurence Norman, A.B. (*Williams Coll.*) 1964. Norwood
- Krauss, Ronald Maxwell, A.B. 1964. Buffalo, N.Y.
- LaCombe, Michael Arthur, A.B. (*Univ. of Rochester*) 1964. Ogdensburg, N.Y.
- Levine, Frederick Hugh, A.B. (*Columbia Univ.*) 1964. Queens Village, N.Y.
- Levy, David Edward, A.B. 1963. Verona, N.J.

HARVARD MEDICAL SCHOOL

- Lobis, Robert Alan, A.B. (*Univ. of Pennsylvania*) 1964. Philadelphia, Pa.
- Looker, Andrew Noah, A.B. 1964. New York, N.Y.
- McBean, Alexander Marshall, A.B. (*Yale Univ.*) 1964. Chatham, N.J.
- Marks, Richard Arlyn, A.B. 1965. Urbana, Ill.
- Marshall, Robert Alan (*Oberlin Coll.*) Dayton, Ohio
- Mattingly, Patrick Hayne, A.B. (*Coll. of the Holy Cross*) 1964. Bethesda, Md.
- Mezan, Peter Bruce, A.B. 1964. Stanford, Conn.
- Morain, William Douglas, A.B. (*Grinnell Coll.*) 1964. Jefferson, Iowa
- Nafziger, Jacob Calvin, A.B. (*Lehigh Univ.*) 1963. Lancaster, Pa.
- Oakes, David Duane, A.B. 1963. LaPorte, Ind.
- Omachi, Rodney Seichi, A.B. (*Stanford Univ.*) 1964. Stockton, Calif.
- Onion, Daniel Kent, A.B. 1964. Castleton, Vt.
- Oredugba, Olumuyiwa, A.B. (*DePauw Univ.*) 1964. Lagos, Nigeria
- Orkin, Fredrick Kent, A.B. (*Bowdoin Coll.*) 1964. New York, N.Y.
- Oyer, David Smith, S.B. (*Univ. of Rochester*) 1964. Rochester, N.Y.
- Patterson, Laird Gunn, A.B. (*Univ. of Kansas*) 1963. Larned, Kans.
- Pauker, Stephen Gary, A.B. 1964. Kingston, N.Y.
- Pearle, David Lee, A.B. (*Amherst Coll.*) 1964. Dallas, Texas
- Peppercorn, Mark Allan, A.B. 1964. Columbus, Ohio
- Perkins, David George, A.B. 1963. Lynnfield
- Pincus, Stephanie Faith Hoyer, A.B. (*Reed Coll.*) 1964. Los Angeles, Calif.
- Podell, Richard Neal, A.B. (*Amherst Coll.*) 1964. Malverne, N.Y.
- Pollard, Thomas Dean, A.B. (*Pomona Coll.*) 1964. San Marino, Calif.
- Posner, Michael Kagan, A.B. (*Yale Univ.*) 1964. Longmeadow
- Prager, Kenneth Michael, A.B. (*Columbia Univ.*) 1964. Brooklyn, N.Y.
- Reale, Vincent Francis, A.B. (*Princeton Univ.*) 1963. Manville, N.J.
- Reed, William Piper, Jr., A.B. 1964. Reading
- Richards, Edith Gilkey, A.B. (*Wellesley Coll.*) 1964. St. Louis, Mo.
- Rieder, Ronald Olrich, A.B. 1964. Trenton, Mich.
- Robertson, Howard Thomas, 2d, A.B. (*Colgate Univ.*) 1964. Denver, Colo.
- Rosenberg, Gary Lawrence, A.B. 1964. University Heights, Ohio
- Russell, Robin Osborne, A.B. (*Yale Univ.*) 1964. Nampa, Idaho
- Rutherford, Robert Carver, A.B. (*Univ. of Washington*) 1964. Seattle, Wash.

STUDENTS

- Sachs, David Howard, A.B. 1963. *Yonkers, N.Y.*
 Schneider, Bruce Solomon, A.B. 1964. *West Englewood, N.J.*
 Seward, Paul North, A.B. (*Stanford Univ.*) 1964 *New York, N.Y.*
 Sloane, Robert Woodard, Jr., s.B. (*Univ. of Michigan*) 1963. *Wauwatosa, Wis.*
 ‡Soper, Michael Ray (*Harvard Coll.*) *Independence, Mo.*
 Sos, Thomas Andrew, A.B. (*Queens Coll. of The City Univ. of New York*) 1964. *Forest Hills, N.Y.*
 Southmayd, William Webster, A.B. 1964. *Newton Centre*
 Spitzer, Nicholas Canaday, A.B. 1964. *Princeton, N.J.*
 Stanberry, Mark Chauncy, s.B. (*Univ. of Arizona*) 1964. *Tucson, Ariz.*
 Stulbarg, Michael Stewart, s.B. (*Massachusetts Inst. of Technology*) 1964. *Cincinnati, Ohio*
 Sun, Edward Ralph, A.B. 1963. *Fayetteville, Pa.*
 Tolkoff, Nina Ellen, A.B. (*Cornell Univ.*) 1964. *Brooklyn, N.Y.*
 Trobe, Jonathan Daniel, A.B. 1964. *Rio de Janeiro, Brazil*
 Walsh, John Vincent, Jr., A.B. (*Boston Coll.*) 1964. *Buffalo, N.Y.*
 Weil, Andrew Thomas, A.B. 1964. *Philadelphia, Pa.*
 Weinstein, John Newman, A.B. 1964. *San Francisco, Calif.*
 Welch, John Paton, A.B. 1964. *Belmont*
 Weyman, Lois Jean, A.B. (*Cornell Univ.*) 1964. *Cincinnati, Ohio*
 Whitfield, Richard Wriston, A.B. (*Brown Univ.*) 1964. *Rye, N.Y.*
 Wittes, Robert Elliot, A.B. 1964. *Woonsocket, R.I.*
 Yanovitch, John Joseph, A.B. (*Manhattan Coll.*) 1964. *Woodside, N.Y.*
 Yanowitz, Ira Sar, A.B. 1964. *Bronx, N.Y.*
 Youngerman, Joseph Kahn, A.B. (*Yale Univ.*) 1964. *Champaign, Ill.*
 Zawadsky, Peter Michael, A.B. (*Rutgers Univ.*) 1964. *Spotswood, N.J.*

FIRST YEAR CLASS (1969)

- Ainslie, George William, Jr., A.B. (*Yale Univ.*) 1965. *Binghamton, N.Y.*
 Allen, Jeffrey Charles, A.B. (*Oberlin Coll.*) 1965. *Livingston, N.J.*

† Degree conferred by Harvard University.

N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

HARVARD MEDICAL SCHOOL

- Arling, Bryan Jeremy, A.B. (*Univ. of Minnesota*) 1965. Minneapolis, Minn.
- Bartrum, Royal Jay, Jr., A.B. (*Carleton Coll.*) 1965. Normal, Ill.
- Bast, Robert Clinton, Jr., A.B. (*Wesleyan Univ.*) 1965. Arlington, Va.
- Bean, Margaret Harvey, A.B.† (*Radcliffe Coll.*) 1965. Iowa City, Iowa
- Bettman, Thomas Coulter, A.B. (*Dartmouth Coll.*) 1965. Cincinnati, Ohio
- Bobroff, Lewis Martin, (*Brooklyn Coll. of The City Univ. of New York*). Brooklyn, N.Y.
- Boehm, Sharon Lynne, s.B. (*Univ. of Wisconsin*) 1965. Itasca, Ill.
- Braden, William, 3d, A.B. 1965. New York, N.Y.
- Brandling-Bennett, Anthony David, A.B. 1964. Los Angeles, Calif.
- Brooks, Benjamin Rix, A.B. 1965. Merion Station, Pa.
- Brooks, Robert William, A.B. (*Williams Coll.*) 1965. Paterson, N.J.
- Bulkley, Gregory Bartlett, A.B. (*Princeton Univ.*) 1965. Winnetka, Ill.
- Burney, Richard Edward, Jr., A.B. 1965. Cleveland, Ohio
- Burns, William Holmes, s.B. (*Yale Univ.*) 1965. Macon, Ga.
- Burr, Winthrop Ames, A.B. 1965. Christiansted, St. Croix, V.I.
- Carey, Edmund Lawrence, Jr., A.B. (*Coll. of the Holy Cross*) 1965. Milton
- Cello, John Patrick, A.B. (*Providence Coll.*) 1965. Cambria Heights, N.Y.
- Chang, Henry, s.B. (*Yale Univ.*) 1965. New York, N.Y.
- Chessen, Douglas Howell, A.B. (*Amherst Coll.*) 1965. Denver, Colo.
- Cloos, David Wilmot, A.B. (*Williams Coll.*) 1965. Richmond Hill, N.Y.
- Cohen, Benjamin Emanuel, A.B. (*Columbia Univ.*) 1965. Macon, Ga.
- Crane, Martin, A.B. (*Princeton Univ.*) 1965. Williston Park, N.Y.
- Crichton, John Michael, A.B. 1964. New Canaan, Conn.
- Dashe, Charles Kay, A.B. (*Univ. of Chicago*) 1965. Gary, Ind.
- Dos Reis, Leslie Jose, A.B. (*Williams Coll.*) 1965. Rye, N.Y.
- Duvinsky, Joel, s.B. (*City Coll. of The City Univ. of New York*) 1965. New York, N.Y.
- Feibel, Robert Marks, A.B. (*Johns Hopkins Univ.*) 1965. Cincinnati, Ohio
- Fernbach, Stephen Alton, A.B. (*Amherst Coll.*) 1965. New York, N.Y.
- Frank, Gerald Warren, A.B. 1965. Winthrop
- Fraser, David William, A.B. (*Haverford Coll.*) 1965. George School, Pa.
- Freed, Curt Richard, A.B. 1965. Euclid, Ohio

STUDENTS

- Freeman, David Lewis, A.B. 1964. Sherborn
 Freeman, Thomas Stanley, A.B. 1964. Glencoe, Ill.
 Gerber, Richard Borisow, A.B. (*Amherst Coll.*) 1965. Washington, D.C.
 Gimbrone, Michael Anthony, Jr., A.B. (*Cornell Univ.*) 1965. Buffalo, N.Y.
 Goldmann, Donald Alan, A.B. 1964. Trenton, N.J.
 Gordon, Jerold Stanley, S.B. (*Antioch Coll.*) 1965. Pittsburgh, Pa.
 Graybeal, Robert Thomas, S.B. (*Duke Univ.*) 1965. Marion, Va.
 Grillo, Peter James, A.B. (*Yale Univ.*) 1965. Andover
 Guyton, David Lee, S.B. (*Univ. of Mississippi*) 1965. Jackson, Miss.
 Hall, John Henry, (*Reed Coll.*). Portland, Oregon
 Hall, Stephen Vincent, A.B. 1965. Champaign, Ill.
 Hallett, Mark, A.B. 1965. Merion, Pa.
 Harper, Gordon Peacock, A.B. 1964. Rochester, N.Y.
 Harrison, Michael Richard, A.B. (*Yale Univ.*) 1965. Vancouver, Wash.
 Healy, Bernadine Patricia, A.B. (*Vassar Coll.*) 1965. Long Island City, N.Y.
 Hertz, Barbara Bendel, A.B. (*Swarthmore Coll.*) 1965. New York, N.Y.
 Hertzman, Marc, A.B. 1965. Cincinnati, Ohio
 Hodes, David Samuel, A.B. (*Princeton Univ.*) 1963, B.A. (*Oxford Univ.*) 1965. Manhasset, N.Y.
 Hodes, Richard Joel, A.B. (*Yale Univ.*) 1965. Wantagh, N.Y.
 Hoffer, Edward Peter, S.B. (*Massachusetts Inst. of Technology*) 1965. Montreal, P.Q., Canada
 Howard, Terry Thomas, A.B. (*Columbia Univ.*) 1965. Rutherford, N.J.
 Hyde, Thomas Prentice, S.B. (*Yale Univ.*) 1965. Evanston, Ill.
 Jablecki, Charles Kasmir, A.B. 1965. Rumford, R.I.
 Kanner, Steven Russell, A.B. 1965. Massapequa Park, N.Y.
 Kaslow, Richard Alan, A.B. (*Yale Univ.*) 1965. Omaha, Nebr.
 Khoury, George, A.B. (*Princeton Univ.*) 1965. Allentown, Pa.
 Knapp, Penelope, A.B.† (*Radcliffe Coll.*) 1963. Cambridge
 Kolb, Jonathan Edward, A.B. 1965. Providence, R.I.
 Krogstad, Donald John, A.B. (*Bowdoin Coll.*) 1965. New Hyde Park, N.Y.
 Lange, Roger Frederick, A.B. 1965. Evanston, Ill.
 Langsdorf, David Stanton, Jr., A.B. (*Stanford Univ.*) 1963. San Mateo, Calif.

HARVARD MEDICAL SCHOOL

- Lemkin, Stephen Richard, A.B. 1965. Lowell
- Leonardi, Howard Kevin, A.B. (*Yale Univ.*) 1965. Swampscott
- Levine, Judith Ann, A.B. (*Swarthmore Coll.*) 1965. New York, N.Y.
- Levine, Robert Aaron, A.B. (*Yale Univ.*) 1965. Waterville, Maine
- Lewis, Brian Joel, A.B. (*Rice Univ.*) 1965. Little Rock, Ark.
- Lewis, Randall Jeffrey, A.B. (*Yale Univ.*) 1965. Taunton
- Lipkin, Mack, Jr., A.B. 1965. New York, N.Y.
- Liteplo, Merrill Gerald, S.B. (*Manhattan Coll.*) 1965. Brooklyn, N.Y.
- Long, Michael Carroll, S.B. (*Massachusetts Inst. of Technology*) 1965. Salisbury, Md.
- McLeod, Bruce Cameron, A.B. (*Univ. of Texas*) 1965. Arkansas City, Kans.
- Macrides, Foteos, S.B. (*Massachusetts Inst. of Technology*) 1965. Stamford, Conn.
- Marinoff, Gerald Paul, A.B. (*Columbia Univ.*) 1965. Brooklyn, N.Y.
- Martin, David Hubert, A.B. (*Univ. of Kansas*) 1965. Coffeyville, Kans.
- Mayer, Robert James, A.B. (*Williams Coll.*) 1965. New Hyde Park, N.Y.
- Mieth, Werner Christian Joseph, A.B. 1965. Union, N.J.
- Miller, John Bruce, A.B. 1965. Maywood, Ill.
- Mitchell, Beverly Shriver, A.B. (*Smith Coll.*) 1965. Auburndale
- Mitchell, Michael Ernst, A.B. (*Princeton Univ.*) 1965. Lincoln Park, N.J.
- Morse, Herbert Carpenter, 3d, A.B. (*Oberlin Coll.*) 1965. La Grange, Ill.
- Murphy, Frank Lloyd, Jr., A.B. 1965. Webster Groves, Mo.
- Noseworthy, John, Jr., S.B. (*Bates Coll.*) 1965. Plymouth, N.H.
- Peterson, Douglas Bergen, A.B. (*Dartmouth Coll.*) 1965. Aurora, Ill.
- Petrucelli, Rocco Joseph, 2d, A.B. (*Yale Univ.*) 1965. Meriden, Conn.
- Quint, Alan Steven, A.B. 1965. Woodbridge, N.J.
- Ré, Richard Noel, A.B. 1965. Palisade, N.J.
- Redfern, Anne Brennan, A.B.† (*Radcliffe Coll.*) 1965. Cincinnati, Ohio
- Rein, Michael Frank, A.B. 1965. New York, N.Y.
- Richards, Keith Chirgwin, A.B. (*Yale Univ.*) 1965. Akron, Ohio
- Rosenblum, Ruth Ellen, (*Wellesley Coll.*). Los Angeles, Calif.
- Rottenberg, David Allan, A.B. (*Univ. of Michigan*) 1963, M.Sc. (*Cambridge Univ.*) 1965. Detroit, Mich.
- Scheinberg, Stephen, S.B. (*Massachusetts Inst. of Technology*) 1960, A.M. (*Princeton Univ.*) 1961, Ph.D. (*ibid.*) 1963. Memphis, Tenn.

STUDENTS

- Schlenker, James David, A.B. 1965. *Peru, Ill.*
 Schutz, James Scott, A.B. (*Yale Univ.*) 1965. *New York, N.Y.*
 Schwartz, Ronald Harris, A.B. (*Cornell Univ.*) 1965. *Kenmore, N.Y.*
 Seaman, William Ewing, A.B. (*Princeton Univ.*) 1964. *East Lansing, Mich.*
 Silvio, Joseph Rocco, A.B. (*Cornell Univ.*) 1965. *Elizabeth, N.J.*
 Snyder, Howard McCrum, 3d, A.B. (*Princeton Univ.*) 1965. *Atlanta, Ga.*
 Spitz, Leslie Mike, A.B. 1965. *Wilmette, Ill.*
 Stephens, Joseph William, 3d, S.B. (*Emory Univ.*) 1965. *Macon, Ga.*
 Tesar, Paul Louis, B.S. IN E.E. (*Univ. of Massachusetts*) 1964. *Flushing, N.Y.*
 Thibault, George Edwin, Jr., A.B. (*Georgetown Univ.*) 1965. *Chittenango, N.Y.*
 Thomas, Elizabeth Walke, A.B.† (*Radcliffe Coll.*) 1965. *Chevy Chase, Md.*
 Tracy, David Mears, A.B. (*Yale Univ.*) 1965. *Pittsfield*
 Trafton, Peter Grier, A.B. (*Yale Univ.*) 1965. *Auburn, Maine*
 Tuffli, Charles Frederick, Jr., A.B. (*Yale Univ.*) 1965. *Menlo Park, Calif.*
 Vickery, Donald Michael, A.B. 1965. *Vienna, Va.*
 Wiley, Richard Haven, Jr., A.B. 1965. *New York, N.Y.*
 Workman, Robert Jay, A.B. (*Princeton Univ.*) 1964. *Staten Island, N.Y.*
 Yurcisin, Daniel, A.B. (*Princeton Univ.*) 1965. *Roebing, N.J.*

MEDICAL SCHOOL SUMMARY 1965-1966

Fourth Year	144
Third Year	152
Second Year	118
First Year	113
Total	527

HARVARD MEDICAL SCHOOL

COLLEGES REPRESENTED

Allegheny College	1	Holy Cross, College of the ..	10
Amherst College	19	Iowa, State University of	1
Antioch College	1	Johns Hopkins University	4
Arizona, University of	2	Kansas, University of	2
Barnard College	4	Kansas State University	1
Bates College	2	Kenyon College	1
Boston College	4	Lehigh University	2
Boston University	1	Manhattan College	2
Bowdoin College	4	Massachusetts, University of ..	1
Brandeis University	4	Massachusetts Institute of Tech-	
Brooklyn College of The City		nology	14
University of New York ..	6	Michigan, University of	5
Brown University	3	Middlebury College	2
Bryn Mawr College	3	Minnesota, University of	1
Bucknell University	1	Mississippi, University of	1
California Institute of Tech-		Mount Holyoke College	1
nology	2	National Defense Medical Cen-	
California, University of (at		ter (Formosa)	1
Berkeley)	2	Nebraska, University of	1
Carleton College	4	New Asia College (Hong	
Carson-Newman College	1	Kong)	1
Chicago, University of	5	New Hampshire, University of	1
City College of The City Uni-		North Dakota, University of ..	1
versity of New York	1	Northwestern University	1
Colby College	1	Notre Dame, University of ...	3
Colgate University	2	Oberlin College	6
Columbia University	16	Ohio State University	1
Cornell University	15	Oklahoma, University of	1
Dartmouth College	31	Oklahoma City University	1
Davidson College	1	Pennsylvania, University of	2
Dayton, University of	1	Pomona College	2
Denison University	2	Princeton University	36
DePauw University	1	Providence College	2
Drake University	1	Queens College of The City	
Duke University	2	University of New York....	1
Emmanuel College	1	Radcliffe College	10
Emory University	1	Reed College	2
Fordham University	1	Regis College (Colorado)	1
Georgetown University	2	Rice University	1
Grinnell College	1	Rochester, University of	3
Hamilton College	2	Rutgers University	2
Harvard University	135	St. John's College (Maryland)	1
Hastings College	1	St. John Fisher College	1
Haverford College	3	St. Louis University	2
Hobart College	1	St. Olaf College	1

COLLEGES REPRESENTED

San Francisco, University of . . .	1	Wheaton College (Illinois) . . .	1
Smith College	1	Willamette University	1
Stanford University	10	Williams College	13
Swarthmore College	7	Wisconsin, University of	3
Texas, University of	2	Yale University	50
Tufts University	2		
Tulane University	1	Total	534
Union College	4	Counted more than once	7
United States Military Academy	1		
Vassar College	1	Total number of students . .	527
Washington, University of . . .	1		
Wellesley College	6	Entered advanced standing . . .	71
Wesleyan University	4	Number of colleges represented	101
Western Reserve University . .	1	Number of college graduates . .	516
		Number of non-graduates	11

MEDICAL SCHOOLS REPRESENTED BY STUDENTS WHO ENTERED HARVARD MEDICAL SCHOOL WITH ADVANCED STANDING

Columbia University College of Physicians and Surgeons . . .	1	Oxford University Medical School (England)	3
Dartmouth Medical School . . .	59	Stanford University School of Medicine	1
Harvard University Division of Medical Sciences	1		
Nebraska, University of, Col- lege of Medicine	1	Total	71
New York University School of Medicine	2		
North Dakota, University of, School of Medicine	3	Total number of students ad- mitted to first year standing	456
		Total	527

SCHOOL OF DENTAL MEDICINE

STAFF

- BARRY J. AGRANAT, D.M.D., Assistant in Oral Surgery.
- JOHN T. ALBRIGHT, D.D.S., Clinical Associate in Oral Pathology.
- MENELAOS A. ALIAPOULIOS, M.D., Research Associate in Pharmacology in the School of Dental Medicine (appointment expired September 30, 1965).
- BENJAMIN H. AMDUR, PH.D., Research Associate in Biological Chemistry at the Forsyth Dental Infirmary for Children.
- MELVIN A. ANDELL, D.D.S., Instructor in Orthodontics.
- DINO R. ANGELICI, D.D.S., Research Fellow in Orthodontics.
- DAVID T. ARMSTRONG, PH.D., Associate in Anatomy in the School of Dental Medicine.
- DOUGLAS A. ATWOOD, M.D., D.M.D., Clinical Associate in Prosthetic Dentistry.
- HERBERT I. BADER, D.D.S., Research Fellow in Periodontology.
- HARRY K. BAILEY, D.M.D., Instructor in Operative Dentistry.
- LAURENCE I. BARSH, D.M.D., Instructor in Operative Dentistry.
- JAMES A. BOND, D.D.S., Research Fellow in Orthodontics.
- CARMEN C. BROWN, D.M.D., Research Fellow in Dentistry (appointment expired September 30, 1965).
- FINN BRUDEVOLD, D.D.S., Professor of Dentistry at the Forsyth Dental Infirmary for Children.
- NORMAN T. BUDDE, D.M.D., Instructor in Pediatric Dentistry.
- DUANE F. CARBONE, D.M.D., Instructor in Dental Medicine.
- RICHARD S. CARROLL, PH.D., Assistant to the Dean of the School of Dental Medicine for Planning and Development.
- JOSEPH CHAMBERLAIN, PH.D., Research Fellow in Pharmacology in the School of Dental Medicine (resigned October 8, 1965).
- ROBERT T. CHATTERTON, JR., PH.D., Research Fellow in Biological Chemistry in the School of Dental Medicine (appointment expired September 15, 1965).
- GEORGE CHRISTMAN, D.M.D., Instructor in Oral Surgery.

SCHOOL OF DENTAL MEDICINE

- CARL G. COHEN, D.M.D., Instructor in Pediatric Dentistry.
MELVIN I. COHEN, D.M.D., Associate Clinical Professor of Orthodontics.
VERA COKLICA, D.D.S., Research Fellow in Dental Medicine.
CARY W. COOPER, PH.D., Research Fellow in Pharmacology in the School of Dental Medicine.
WILLARD A. COY, D.M.D., Instructor in Prosthetic Dentistry.
MILES A. CRENSHAW, PH.D., Instructor in Physiology at the Forsyth Dental Infirmary for Children.
G. NOEL CURRIE, PH.D., Research Fellow in Anatomy in the School of Dental Medicine.
ZEEV DAVIDOVITCH, D.M.D., Research Fellow in Orthodontics.
VINCENT DEANGELIS, D.M.D., Research Fellow in Orthodontics.
HERMAN DE WILDE, M.D., D.M.D., Clinical Associate in Oral Surgery.
I. LEON DOGON, L.D.S., D.M.D., Associate in Operative Dentistry at the Forsyth Dental Infirmary for Children.
JOEL P. DOUGLAS, D.M.D., Instructor in Orthodontics.
JOHN D. DOYKOS, 3D, D.M.D., Assistant in Pediatric Dentistry.
JAMES M. DUNNING, D.D.S., M.P.H., Professor of Ecological Dentistry.
HAROLD L. EHRLICH, D.M.D., Assistant Clinical Professor of Prosthetic Dentistry.
HENRY D. EPSTEIN, D.M.D., Clinical Associate in Periodontology.
JAMES W. ETHERINGTON, D.M.D., Assistant Clinical Professor of Operative Dentistry.
ROBERT E. EVANS, D.M.D., Teaching Fellow in Dental Medicine.
DAVID J. FARRELL, D.M.D., Assistant Clinical Professor of Prosthetic Dentistry.
ROBERT W. FASCIANO, D.M.D., Instructor in Periodontology.
NORTON FISHMAN, D.M.D., Instructor in Prosthetic Dentistry.
GEORGE FREEDMAN, M.A., Lecturer on Prosthetic Dentistry.
STEPHEN H. GAMM, D.M.D., Research Fellow in Orthodontics.
PHILIAS R. GARANT, D.M.D., Research Fellow in Periodontology.
RONALD J. GELLERT, PH.D., Research Fellow in Physiology in the School of Dental Medicine.

HARVARD UNIVERSITY

- IRWIN I. GETZ, D.D.S., Instructor in Prosthetic Dentistry.
- RONALD J. GIBBONS, PH.D., Assistant Professor of Bacteriology at the Forsyth Dental Infirmary for Children.
- DONALD B. GIDDON, D.M.D., Lecturer on Ecological Dentistry.
- ROBERT L. GLASS, D.M.D., DR.P.H., Associate Clinical Professor of Ecological Dentistry and Director of Clinical Services.
- HAROLD S. GOLD, D.M.D., Instructor in Prosthetic Dentistry.
- PAUL GOLDBABER, D.D.S., Associate Professor of Periodontology and Tutor in Dental Sciences.
- JOEL GOLDIN, D.M.D., Instructor in Prosthetic Dentistry.
- LORNE M. GOLUB, D.M.D., Research Fellow in Periodontology.
- DWIGHT F. GORDON, PH.D., Research Fellow in Bacteriology at the Forsyth Dental Infirmary for Children.
- ROY O. GREEP, PH.D., D.Sc. (hon.), Professor of Anatomy in the School of Dental Medicine and Dean.
- ANNA-MARIE GRØN, D.D.S., Associate in Orthodontics at the Forsyth Dental Infirmary for Children.
- POUL GRØN, D.D.M., Assistant Professor of Dentistry at the Forsyth Dental Infirmary for Children.
- WALTER C. GURALNICK, D.M.D., Associate Clinical Professor of Oral Surgery.
- HAROLD D. HAFS, PH.D., Research Associate in Physiology in the School of Dental Medicine.
- E. ROBERT HAYNES, D.M.D., Instructor in Operative Dentistry.
- JOHN W. HEIN, D.M.D., PH.D., Professor of Dentistry at the Forsyth Dental Infirmary for Children and Director, Forsyth Dental Infirmary for Children.
- FRANCISCO HERNANDEZ-OQUENDO, D.M.D., M.P.H., Research Fellow in Ecological Dentistry.
- TERRENCE D. HOOVER, D.M.D., Instructor in Pediatric Dentistry.
- LOUISE W. HORD, B.S., Lecturer on Ecological Dentistry.
- MINORU HORIUCHI, D.M.D., Instructor in Dental Medicine.
- EDWARD E. HUNT, JR., PH.D., Assistant Professor of Anthropology at the Forsyth Dental Infirmary for Children.
- JOHN S. M. HUTCHINSON, PH.D., Research Associate in Dental Medicine.

SCHOOL OF DENTAL MEDICINE

JAMES T. IRVING, PH.D., M.D., Professor of Physiology at the Forsyth Dental Infirmary for Children (on leave, September 1, 1965 to February 28, 1966).

THEODORE M. JACKANICZ, PH.D., Research Fellow in Biological Chemistry in the School of Dental Medicine.

LEIF B. JOHANNESSEN, D.M.D., Research Associate in Dental Medicine.

RONALD JOHNSON, D.D.S., Research Fellow in Pediatric Dentistry.

ANTHONY JONG, D.D.S., Research Fellow in Ecological Dentistry (from September 15, 1965).

PAUL J. KALIS, D.M.D., Assistant in Periodontology.

EDWARD F. KASTELIC, D.D.S., Research Fellow in Ecological Dentistry.

ELIAS J. KAUFMAN, D.M.D., Research Fellow in Pediatric Dentistry.

FRANCIS B. T. H. KHOUW, D.M.D., Research Fellow in Orthodontics.

PETER G. KIMBALL, D.M.D., Assistant in Dental Medicine.

ALVIN A. KRAKOW, D.D.S., Instructor in Dental Medicine.

HARRY KUSHNIR, D.M.D., Instructor in Prosthetic Dentistry.

DONALD L. LEAKE, D.M.D., Research Fellow in Dental Medicine.

CLEMENT S. C. LEAR, B.D.S., D.M.D., Associate in Orthodontics at the Forsyth Dental Infirmary for Children.

LAURE LEBRET, D.F.M.P., Associate in Orthodontics at the Forsyth Dental Infirmary for Children.

GARY S. LESKE, D.D.S., Research Fellow in Ecological Dentistry.

ROBERT C. LINCOLN, D.M.D., Instructor in Oral Surgery.

PAUL K. LOSCH, D.D.S., Associate Professor of Pediatric Dentistry at The Children's Hospital and Chief of the Dental Service at The Children's Hospital Medical Center.

GORDON J. MACDONALD, PH.D., Research Associate in Physiology in the School of Dental Medicine.

PATRICIA W. MAJOR, PH.D., Research Fellow in Dental Medicine.

ROBERT J. MATUSOW, D.M.D., Instructor in Operative Dentistry.

EDWARD C. McNULTY, D.M.D., Research Fellow in Orthodontics.

HARVARD UNIVERSITY

- GILBERT H. MEYER, JR., D.M.D., Research Fellow in Orthodontics.
- STEVEN A. MILLER, D.M.D., Assistant in Periodontology.
- PETER B. MILLS, D.D.S., Research Fellow in Orthodontics.
- RICHARD L. MINER, D.D.S., Instructor in Oral Surgery.
- COENRAAD F. A. MOORREES, D.D.S., Professor of Orthodontics at the Forsyth Dental Infirmary for Children.
- EDWARD M. MORIN, D.M.D., Instructor in Orthodontics.
- PAUL L. MUNSON, PH.D., Professor of Pharmacology in the School of Dental Medicine (resigned August 31, 1965); Lecturer on Pharmacology in the School of Dental Medicine (from September 1, 1965).
- JOHN NALBANDIAN, D.M.D., Assistant Professor of Operative Dentistry.
- J. HOWARD OAKS, D.M.D., Lecturer on Dentistry, Tutor in Medical Science, and Associate Dean of the School of Dental Medicine for Student Affairs.
- PETER OFNER, PH.D., Research Associate in Pharmacology in the School of Dental Medicine.
- HIROSHI ONO, D.D.S., Research Fellow in Orthodontics.
- TAI-CHAN PENG, M.D., Instructor in Pharmacology in the School of Dental Medicine (from September 1 to November 30, 1965).
- ALAN B. PERKIN, D.D.S., Research Fellow in Periodontology.
- ANGELA A. V. PERONACE, D.D.S., Research Fellow in Dentistry (appointment expired December 31, 1965).
- E. ALBERT PETERSEN, D.M.D., Assistant in Pediatric Dentistry.
- ROBERT L. ROEBUCK, D.M.D., Teaching Fellow in Pediatric Dentistry.
- EARLE H. ROSENBERG, D.M.D., Instructor in Dental Medicine.
- JULIAN M. ROTHBLATT, D.M.D., Instructor in Orthodontics.
- STEPHEN S. ROTHMAN, D.D.S., PH.D., Instructor in Physiology in the School of Dental Medicine.
- IRVING M. SHAPIRO, M.Sc., Research Fellow in Dental Medicine.
- JAMES H. SHAW, PH.D., Professor of Nutrition in the School of Dental Medicine.

SCHOOL OF DENTAL MEDICINE

LEONARD B. SHULMAN, D.M.D., Research Associate in Oral Surgery.

EDWARD I. SILVER, D.M.D., Lecturer on Orthodontics.

SIGMUND S. SOCRANSKY, D.D.S., Assistant Professor of Periodontology at the Forsyth Dental Infirmary for Children.

RUNE S. A. SÖREMARK, D.D.S., Ph.D., Visiting Professor of Dentistry.

JAMES H. SOWLES, D.M.D., Instructor in Operative Dentistry.

MORTON SPECK, D.M.D., Instructor in Orthodontics.

ARTHUR I. STEINBERG, D.D.S., Research Fellow in Periodontology.

J. HENRY STEMPIEN, D.M.D., Assistant in Dental Medicine.

BURT D. STERN, D.M.D., Associate in Periodontology.

STEPHEN STONE, D.M.D., Assistant in Periodontology.

MOSES S. STROCK, D.M.D., Associate Clinical Professor of Dental Medicine.

PETER E. STROCK, D.D.S., Research Fellow in Dental Medicine.

LENNARD T. SWANSON, D.M.D., Clinical Associate in Orthodontics.

EDWARD A. SWEENEY, D.M.D., Associate in Pediatric Dentistry.

ARMEN H. TASHJIAN, JR., M.D., Associate in Pharmacology in the School of Dental Medicine.

P. JOSEPH THOMAS, Ph.D., Research Fellow in Pharmacology in the School of Dental Medicine.

G. EARL THOMPSON, D.M.D., Clinical Professor of Operative Dentistry.

SVEIN U. TOVERUD, D.M.D., Research Fellow in Pharmacology in the School of Dental Medicine (appointment expires April 30, 1966).

NORMAN TRIEGER, D.M.D., Clinical Associate in Dental Medicine (resigned September 10, 1965).

LOUIS J. VALENTE, D.M.D., Research Fellow in Dental Medicine.

GERRIT J. VAN CAMPEN, D.D.S., Research Fellow in Dental Medicine.

MYRON J. VAN LEEUWEN, D.D.S., Assistant Clinical Professor of Operative Dentistry.

JOHN T. WALDRON, JR., D.D.S., Research Fellow in Orthodontics.

HARVARD UNIVERSITY

ANNA B. WASTHED, PH.D., Research Fellow in Pharmacology in the School of Dental Medicine.

ROBERT F. WATTON, D.M.D., Lecturer on Pediatric Dentistry.

ALFRED WEINSTOCK, D.D.S., Research Fellow in Periodontology.

MELVYN WEINSTOCK, D.D.S., Research Fellow in Orthodontics.

DAVID WEISBERGER, D.M.D., M.D., Professor of Dental Medicine and Chief of the Dental Department at the Massachusetts General Hospital.

WILLIAM D. WELLOCK, D.M.D., M.P.H., Lecturer on Ecological Dentistry.

HERBERT WELLS, D.M.D., Assistant Professor of Dentistry, Tutor in Medical Science, and Director of the Clinic.

PHILIP H. WHITE, D.M.D., Lecturer on Oral Surgery.

WILLIAM L. WILSON, D.M.D., Lecturer on Orthodontics.

ROY E. WUTHIER, PH.D., Associate in Biological Chemistry at the Forsyth Dental Infirmary for Children.

PETER K. YEN, D.M.D., Clinical Associate in Orthodontics.

B. JALALDIN ZULQUAR-NAIN, B.D.S., Research Fellow in Dental Medicine (resigned October 31, 1965).

Affiliated:

RICHARD E. COGGESHALL, M.D., Instructor in Anatomy.

RITA J. NICKERSON, A.M., Research Associate in Preventive Medicine.

GEORGE F. WILGRAM, DR.PHIL., Assistant Professor of Dermatology.

SCHOOL OF DENTAL MEDICINE

ANNOUNCEMENT OF COURSES

During the first two academic years, dental and medical students pursue courses of study that are alike in philosophy and objectives but that differ in content. Special exercises have been devised for dental and medical students to illustrate for each group how the basic sciences serve their respective professions. Tutorial study of dental students is under the direction of the dental staff.

As the entering classes are limited, it is possible to reduce the time usually involved in courses of dental techniques. Individual instruction, demonstrations, seminars, and conferences replace the traditional lecture system to a large degree.

A program to instruct third and fourth year students in effective use of ancillary dental personnel provides experience for each student in the performance of clinical procedures with the aid of a trained dental assistant or hygienist. Auxiliary personnel are also utilized to relieve the student of a variety of routine but time-consuming tasks.

INTRODUCTION TO THE HEALTH SCIENCES. First year. First two weeks after Labor Day. Professor SHAW. Drs. SWEENEY, WUTHIER, CARBONE, and GUEST LECTURERS.

In this laboratory and lecture course, selected fundamental concepts learned in college sciences are considered in relation to health and disease in man as demonstrations of the vital relevance of scientific information for the understanding and solving of biological problems by the student and the dentist.

ORAL HISTOLOGY AND PATHOPHYSIOLOGY. Second year. Dr. GOLDHABER and ASSOCIATES.

A seminar and laboratory course devoted primarily to the growth and development of the tooth and surrounding structures and the pathology of these tissues. Special lectures concerning biochemistry, physiology, experimental pathology, and epidemiology are included.

FUNDAMENTALS OF OCCLUSION. Third year. Dr. EPSTEIN and ASSOCIATES.

This course represents a combined effort of many disciplines to provide basic information on the stomatognathic system as a background for an understanding of occlusion.

HARVARD UNIVERSITY

DENTAL ANATOMY. First semester, third year. Assistant Professors VAN LEEUWEN and NALBANDIAN.

Instruction in dental anatomy and tooth morphology. Special emphasis is placed on individual tooth form and the relationship of the tooth in the dental arch to adjacent teeth, opposing teeth and supporting tissue. Technique practice in reproduction of tooth form is stressed using natural extracted teeth.

GENETICS AND ANTHROPOLOGY. First semester, third year. Assistant Professor HUNT.

Lectures are given with the purpose of reviewing the principles of genetics, including studies of populations. A brief survey of anthropology is given with major emphasis on evolutionary changes in the head. Dental implications are stressed throughout the course.

NUTRITION. Third year. Professor SHAW and Dr. SWEENEY.

Discussion of relations of nutrition to the development, maturation and maintenance of the oral tissues. Discussion of nutritional requirements, relative values of various foods and the preparation of diet histories. Clinic practice in the evaluation of diet histories and in the development of suitable recommendations for the patient.

ORAL HISTOPATHOLOGY. Third year. Associate Professor GOLDHABER; Drs. NALBANDIAN, STERN, STONE, and KALIS.

The course consists of weekly two hour sessions composed of lectures, laboratory and student reports on the literature. The subject matter includes the histology and pathology (light microscopy and electron microscopy) of teeth and pulp, periodontium, oral mucosa, salivary glands and bone. Attempts are made to correlate the microscopic picture with the clinical findings. Emphasis is placed on experimental pathology.

DENTAL MEDICINE. Third and fourth years. Professor WEISBERGER; Drs. CHRISTMAN, ROSENBERG, KIMBALL and CARBONE.

A course devoted to the diagnosis and treatment of oral diseases, i.e., diseases of the periodontium, dental pulp, oral mucosa and other oral structures together with their correlation to systemic conditions. Lectures, seminars, clinical practice and observation are given both in the School Dental Clinic and at the Massachusetts General Hospital. Assignments are also made at the Peter Bent Brigham Hospital.

SCHOOL OF DENTAL MEDICINE

Infirmary procedures, identification of oral structures, methods of oral examination, history taking, and common methods of diagnosis for dental and oral disease are given in both years, supplemented by practice in the general clinic.

ECOLOGICAL DENTISTRY. Third and fourth years. Professor DUNNING and Associate Clinical Professor GLASS; Drs. HUNT, GIDDON, and WELLOCK of the School of Dental Medicine; Dr. BALDWIN of the Forsyth Dental Center; Drs. SCHMIDT, PECHANSKY, and YOUNG of the School of Public Health; and Dr. KING of the University Health Services.

The goal of this Department is to relate dentistry to the environment in which dental diseases occur and in which dentists must work. The teaching program of the Department includes application of statistical methods to the problems of dental disease in population groups, the place of various types of disease prevention, the relation of the dentist to society, and the scope of dentistry in comprehensive health service.

In the third year, the course begins with material on behavior problems of patients, especially children. Next comes a section on biostatistics, a continuation from material presented earlier. Preventive dentistry, epidemiology of dental disease, and the educational, cultural, and organizational problems of dental public health programs occupy the rest of the year. Visits are made to a fluoridation installation and a health center. Caries control procedures are carried out with selected clinic patients. Following this year's instruction, the student makes a survey of the health resources in a community of his choice.

In the fourth year, psychosocial problems in dentistry are taken up first. Then comes material on organization and financing of dental care programs, dental practice management, ethics and jurisprudence. Interview techniques and further caries control procedures are carried out with clinic patients.

ENDODONTICS. Third and fourth years. Dr. MATUSOW and ASSOCIATES.

In the third year, the student learns a clinical interpretation of pulpal and periapical disease, with a rationale for root canal therapy. Fundamental concepts in pathology, bacteriology and other preclinical sciences are correlated with the course. Basic endodontic proce-

HARVARD UNIVERSITY

dures are introduced through lectures, laboratory techniques, and clinical demonstrations prior to the treatment of patients.

In the fourth year, clinical experience is amplified with lectures, seminars, and case discussions. More complex endodontic procedures, in addition to periapical surgery, are introduced.

Throughout the course, the integration of endodontics with related dental disciplines is emphasized. The student obtains a perspective of the subject as a part of the total oral health picture.

OPERATIVE DENTISTRY. Third and fourth years. Assistant Professor NALBANDIAN; Drs. THOMPSON, ETHERINGTON, VAN LEEUWEN, DOGON, BAILEY, HAYNES, MATUSOW, and SOWLES.

Throughout the two year course, emphasis is placed upon early student-patient contact with immediate clinical application of treatment procedures. In the third year, instruction is given in oral hygiene and the clinical aspects of caries and other dental diseases. By way of lectures, demonstrations, and individual chairside discussions, the student develops proficiency in examination, diagnosis, and treatment planning. Most of the current techniques of cavity preparation utilizing conventional and high speeds are given, in conjunction with study of the various types of restorative materials.

In the fourth year, gold foil restorations are taught; some recently developed procedures are introduced and clinical practice in all phases of operative dentistry continues.

ORAL SURGERY. Third and fourth years. Professor WEISBERGER; Drs. GURALNICK, DEWILDE, CHRISTMAN, LINCOLN, MINER, AGRANAT and WHITE.

Early in the third year the students receive instruction in the basic operative techniques of general and oral surgery at the surgical laboratories of the Massachusetts General Hospital. These preliminary exercises are followed by lectures, seminars, and clinical practice of oral surgery and anesthesiology at the School of Dental Medicine clinic.

In the fourth year students are assigned to the Massachusetts General Hospital as clinical clerks on the Dental Service. At the hospital more extensive surgery of the oral cavity including traumatic injuries to the face and jaws is observed. The student takes active part in the study and treatment of such cases. Additional training in oral surgery is made available at the Boston City Hospital.

SCHOOL OF DENTAL MEDICINE

ORTHODONTICS. Third and fourth years. Professor C. F. A. MOOREES; Drs. A. M. GRØN, LEAR, LEBRET, SWANSON, and DOUGLAS.

The treatment of patients with different occlusal anomalies, in collaboration with postgraduate Fellows, provides a means to become thoroughly familiar with clinical aspects of orthodontics during the third and fourth years. This experience adds a measure of perspective for the theoretical part of the course that consists of lectures, seminars, and diagnostic conferences. Emphasis is placed on growth and development, cephalometrics, as well as specific phases of genetics, biostatistics, anthropology and histology. Clinical demonstrations and laboratory technique exercises serve to enhance comprehension of treatment procedures. Patients are obtained from the Forsyth Dental Infirmary for Children, while the cleft palate clinic of the Children's Hospital Medical Center collaborates in the teaching efforts. The over-all objective of the course is to develop sound judgment as a basis for diagnosis and care of children in clinical practice.

PEDIATRIC DENTISTRY. Third and fourth years. Associate Professor LOSCH; Drs. BUDDE, HOOVER, C. COHEN, PETERSEN and WATTON.

Lectures and demonstrations introduce the subject in the third year with emphasis on the physical and psychological development of the child. During the pedodontic clinic, the student practices routine dental care for children. Treatment planning and an understanding of dental development are stressed.

The fourth year student continues to practice in the pedodontic clinic. Lectures and clinic procedures now stress the preventive aspects in children's dentistry, especially patient and parent education in oral hygiene and personal caries control as well as space maintenance, correction of oral habits, and tooth guidance.

In addition, the senior student visits the Dental Department of the Children's Hospital Medical Center where he is exposed to the management of the unusual cases best seen in a hospital atmosphere, as well as observing dental rehabilitation procedures performed by the hospital dental staff in the main operating rooms. Special emphasis is given those patients whose systemic disease includes oral manifestations.

PERIODONTICS. Third and fourth years. Associate Professor GOLDBABER; Drs. EPSTEIN, NALBANDIAN, STERN, FASCIANO, KALIS, MILLER, and STONE.

HARVARD UNIVERSITY

The student is taught to recognize and diagnose periodontal disease and to comprehend its pathogenesis. He is expected to understand the role of local etiological factors as well as the part played by systemic disease in modifying tissue response to local irritations.

With regard to therapy, emphasis is placed on the elimination of local factors and the institution of preventive procedures. In addition, he is taught the principles of occlusal equilibration and splinting of loose teeth. All students are required to perform periodontal surgery.

PROSTHETIC DENTISTRY. Third and fourth years. Visiting Professor SÖREMARK; Drs. EHRLICH, FARRELL, ATWOOD, FISHMAN, GOLD, GOLDIN, GETZ, and KUSHNIR.

Prosthetic dentistry which includes complete, fixed and removable prosthesis is taught in the third and fourth years. Through lectures, conferences and demonstrations the student receives clinical and laboratory instruction in the anatomy and physiology of the mouth as it applies to prosthetic dentistry, and in the materials and techniques of prosthetic restoration directed toward oral health, function and aesthetics. Every effort is made to provide early clinic contacts and to teach techniques on clinic cases. The high teacher-student ratio, small classes and special physical facilities favor this type of instruction.

RESEARCH PROJECT. Third and fourth years. Professor MUNSON and OTHERS.

In order to gain a more realistic appreciation of the nature of scientific research, all students of the Harvard School of Dental Medicine, as a requirement for graduation, participate in a laboratory or clinical investigation of their own choosing. By the end of the first semester of the third year, the student has chosen a research supervisor from the faculty and the subject to be investigated. He presents a plan for his research project in the form of a seminar at the beginning of the second semester. During the rest of the third year, and in some cases during the summer months, he attempts to master the techniques necessary for his work. During the fourth year, with the advice and aid of the faculty research supervisor, the project is carried forward, and at the end of the year, the student presents a seminar summarizing his results. Both the third and fourth year seminars are also required in written form for permanent reference in the Library.

SCHOOL OF DENTAL MEDICINE

ROENTGENOLOGY. Third and fourth years. Visiting Professor SÖREMARK and Dr. DEWILDE.

Principles of applied roentgenology and the interpretation of radiographs, with consideration of the electro-physical basis of roentgenology, are covered in the third year. Practice in radiological technique and interpretation is given in both years.

SURGICAL ANATOMY OF THE HEAD AND NECK. Fourth year elective offered to selected students for two full weeks in February. Assistant Clinical Professor GURALNICK and Dr. EDWARDS from the Medical School.

The course is designed primarily to enable the student through his own dissections to gain knowledge of the anatomy of operative oral surgery.

The first week is spent in doing eight regional dissections. The second week is devoted to performing specific surgical procedures with emphasis on anatomical dissection. The laboratory exercises are supplemented by lectures and by the use of motion pictures.

Eligibility for admission is determined by the Fourth Year Promotion Board to whom application should be made by letter prior to December first of the senior year.

COURSE FOR DENTAL GRADUATES

The following course is given in cooperation with the Committee on Courses for Graduates of the Faculty of Medicine.

DENTAL MEDICINE I. Dr. ROY O. GREEP and ASSOCIATES.

This course is designed for dental teachers, foreign students of special ability, and others who wish to combine clinical study with elective research in the laboratories of the School. Only a very small number of students will be admitted. Curriculum will be designed to meet individual needs and the entire facilities of the School may be utilized. Tuition will be at the rate of \$2000 annually.

Four or eight months, October through January and/or February through May; daily, all day, except Saturday afternoons. Attendance limited.

HARVARD UNIVERSITY

DIVISION OF HOURS for the Third and Fourth Years

	<i>Third Year</i>	<i>Fourth Year</i>
Dental Anatomy	79	
Fundamentals of Occlusion	15	
Genetics and Anthropology	16	
Nutrition	16	
Oral Histopathology	77	
Dental Medicine	42	65
Ecological Dentistry	39	21
Endodontics	30	78
Operative Dentistry	398	305
Oral Surgery	76	96
Orthodontics	171	136
Pediatric Dentistry	34	93
Periodontics	135	144
Prosthetic Dentistry	649	494
Research Project Seminars	12	12
Roentgenology	8	19
Clinical Pharmacology		25
Surgical Anatomy of the Head and Neck		59

DEGREES CONFERRED

ON JUNE 17, 1965 EIGHT DEGREES WERE CONFERRED
AS FOLLOWS:

D.M.D.

- ROBERT LEE BECK, A.B. (*Univ. of Virginia*) 1958.
RICHARD BARNHILL PEKRUHN, A.B. (*Oberlin Coll.*) 1961.
WILLIAM HOWARD SUSKIN, A.B. (*New York Univ.*) 1947.
WILLIAM CURTIS WILLISTON, S.B. (*Coll. of the Holy Cross*) 1957.

D.M.D. cum laude

- BRUCE THOMPSON BLEIL, A.B. (*Rice Univ.*) 1961.
WILLIAM MARTIN DAVIDSON, A.B. (*Dartmouth Coll.*) 1960.
PHILIAS ROY GARANT, S.B. (*Tufts Univ.*) 1958.
LEWIS BROWN HARDEN (*Iowa State Teachers Coll.*).

SCHOOL OF DENTAL MEDICINE STUDENTS

FOURTH YEAR CLASS (1966)

- Atikian, Hrair H, A.B. (*New York Univ.*) 1962. Boonton, N. J.
 Binder, Robert Edward, S.B. (*Northeastern Univ.*) 1960. Hyde Park
 Bowen, Charles Raymond, A.B. (*Susquehanna Univ.*) 1962. Selinsgrove, Pa.
 ‡Cotmore, John Mason (*Temple Univ.*) London, England
 Gettleman, Lawrence Marvin, A.B. (*Rutgers Coll.*) 1962. Miami Beach, Fla.
 Gordon, George David, A.B. (*Bowdoin Coll.*) 1961. Belmont
 Gracia, Robert Manuel, A.B. (*Coll. of the Holy Cross*) 1962. New Bedford
 Manasek, Francis John, A.B. (*Columbia Univ.*) 1961. New York, N. Y.
 Mulvihill, James Edward, A.B. (*Coll. of the Holy Cross*) 1962. Boston
 Robinson, Jiles Leslie, Jr., A.B. 1962. Washington, D. C.
 Siegel, Carl Leonard, A.B. (*Lafayette Coll.*) 1962. New York, N. Y.
 Stanley, Robert Louis, A.B. (*Coll. of the Holy Cross*) 1962. Brooklyn, N. Y.
 Wing, Kenneth Richmond, A.B. (*Wesleyan Univ.*) 1962. Cranston, R.I.

THIRD YEAR CLASS (1967)

- Anapolle, Steven Eric, A.B. (*Boston Univ.*) 1963. Newton Centre
 Bailes, Charles Seiler, A.B. (*Susquehanna Univ.*) 1956. [Hahnemann
 Medical Coll.]. Williamsport, Pa.
 Balaban, Stuart James, S.B. (*New York Univ.*) 1963. New York, N.Y.
 Dick, Douglas Shelton A.B. (*Yale Univ.*) 1963. Wellesley Hills
 Donoff, Robert Bruce, S.B. (*Brooklyn Coll. of The City Univ. of New
 York*) 1963. Brooklyn, N.Y.
 ‡Elias, Arthur Charles (*Brandeis Univ.*). Westbury, N.Y.

‡ Admitted on basis of three years' college work.

N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

STUDENTS

- Goldberg, Norman Leon, A.B. (*Brandeis Univ.*) 1963. *Newton*
Hilzenrath, Stephen Sidney, A.B. (*Brandeis Univ.*) 1963. *New York, N. Y.*
Hirschman, Richard David, A.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N.Y.*
Knoettner, Philip Val, A.B. (*Dartmouth Coll.*) 1963. *Bedford, N. H.*
Mopsik, Edward Robert, s.B. (*Queens Coll. of The City Univ. of New York*) 1963. *Forest Hills, N.Y.*
Mosadomi, Hezekiah Adeyemi, s.B. (*Mt. Union Coll.*) 1962. [Univ. of Rochester School of Medicine]. *Osogbo, Nigeria*
Perkell, Joseph Shaile, s.B. (*Massachusetts Inst. of Technology*) 1962. *Coral Gables, Fla.*
Rowan, Michael Edward, A.B. 1963. *Wellesley Hills*
‡Sande, David Lewis, (*Univ. of North Dakota*) *Grand Forks, N. Dak.*
Scharke, Clifford Craig, A.B. (*New York Univ.*) 1963. *Jamaica, N. Y.*
Super, Stuart, A.B. (*New York Univ.*) 1963. *Brooklyn, N. Y.*

SECOND YEAR CLASS (1968)

- Cashion, Paul David, A.B. (*Coll. of the Holy Cross*) 1964. *Roslindale*
Cote, Donald Eugene, s.B. (*Coll. of the Holy Cross*) 1964. *Rockland*
§Dinnerman, Peter Michael (*Univ. of New Hampshire*) *Portsmouth, N. H.*
Flamm, Martin Benjamin, A.B. (*Columbia Univ.*) 1964. *New York, N.Y.*
‡Frank, Robert Allen (*Queens Coll. of The City Univ. of New York*) *Flushing, N. Y.*
‡Goff, Paul Henry (*Fairleigh Dickinson Univ.*) *Plainview, N. Y.*
‡Goldstein, Gary Stephen (*Univ. of Connecticut*) *Norwalk, Conn.*
Maron, Sheldon Steven, s.B. (*Boston Coll.*) 1964. *Revere*
‡Roser, Steven Malcolm (*Middlebury Coll.*) *West Newton*
Seldin, Edward Bert, s.B. (*Tufts Univ.*) 1964. *New York, N. Y.*
‡Trauring, Charles Maurice (*Columbia Univ.*) *New York, N. Y.*
§Walling, Marlin Worth (*Sacramento State Coll.*) *Sacramento, Calif.*

‡ Admitted on basis of three years' college work.

§ Admitted on basis of four years' college work.

N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

HARVARD UNIVERSITY

FIRST YEAR CLASS (1969)

- Altman, Leonard Charles, A.B. (*Univ. of Pennsylvania*) 1965. *Flushing, N.Y.*
- ‡Baer, Warren Sheldon (*Boston Univ.*) *Woburn*
- ‡Bauer, Reginald Alexander (*Univ. of California at Los Angeles*) *Los Angeles, Calif.*
- ‡Bryan, David Edward (*Boston Univ.*) *West Roxbury*
- Evans, Bruce Eugene, A.B. (*Williams Coll.*) 1965. *Portland, Maine*
- Foord, William Dennis, S.B. (*Wesleyan Univ.*) 1965. *Garden City, N.Y.*
- Haddad, Raymond David, A.B. (*Univ. of New Hampshire*) 1965. *Methuen*
- Hymoff, Richard Steven, A.B. (*Brandeis Univ.*) 1965. *Brookline*
- Isenstadt, Lester, S.B. (*Boston Univ.*) 1964. *Cambridge*
- ‡Kaban, Leonard Bruce (*Queens Coll. of The City Univ. of New York*) *Flushing, N.Y.*
- Kallio, Donald Michael, A.B. (*Coll. of the Holy Cross*) 1965. *Worcester*
- ‡Leaf, Robert Jay (*Cornell Univ.*) *Harrison, N.Y.*
- Piecuch, Joseph Francis, A.B. (*Univ. of Massachusetts*) 1965. *Indian Orchard*
- ‡Rothman, Kenneth Jay (*Colgate Univ.*) *Long Beach, N.Y.*
- Shay, Norbert James, Jr., S.B. (*Siena Coll.*) 1965. *Menands, N.Y.*
- Weiner, Allen Lewis, A.B. (*Yeshiva Univ.*) 1965. *Winthrop*

DENTAL SCHOOL SUMMARY 1965-66

Fourth Year	13
Third Year	17
Second Year	12
First Year	16
	—
Total	58

‡ Admitted on basis of three years' college work.

N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

SCHOOL OF DENTAL MEDICINE

COLLEGES REPRESENTED

Boston College	1	New York University	4
Boston University	4	North Dakota, University of . . .	1
Bowdoin College	1	Northeastern University	1
Brandeis University	4	Pennsylvania, University of . . .	1
Brooklyn College of The City University of New York . . .	2	Queens College of The City University of New York . . .	3
California, University of, at Los Angeles	1	Rutgers University	1
Colgate University	1	Sacramento State College	1
Columbia University	3	Siena College	1
Connecticut, University of . . .	1	Susquehanna University	2
Cornell University	1	Temple University	1
Dartmouth College	1	Tufts University	2
Fairleigh Dickinson University .	1	Wesleyan University	1
Harvard University	2	Williams College	1
Holy Cross, College of the . . .	6	Yale University	1
Lafayette College	1	Yeshiva University	1
Massachusetts, University of . .	1	Total number of students . . .	58
Massachusetts Inst. of Tech- nology	1		
Middlebury College	1	Number of colleges represented	35
Mt. Union College	1	Number of college graduates . .	45
New Hampshire, University of . .	2	Number of non-graduates . . .	13

MEDICAL SCHOOLS REPRESENTED BY STUDENTS WHO ENTERED HARVARD SCHOOL OF DENTAL MEDICINE WITH ADVANCED STANDING

Hahnemann Medical College . . .	1	Rochester, University of, School of Medicine	1
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PROFESSORS EMERITI

FULLER ALBRIGHT, M.D.	Professor of Medicine
JOSEPH C. AUB, M.D.	Professor of Research Medicine
GEORGE P. BERRY, M.D.	Professor of Bacteriology
GRETE L. BIBRING, M.D.	Clinical Professor of Psychiatry
HERRMAN L. BLUMGART, M.D.	Professor of Medicine
C. SIDNEY BURWELL, M.D.	Samuel Levine Professor of Medicine
ALLAN M. BUTLER, M.D.	Professor of Pediatrics
EDWARD D. CHURCHILL, M.D.	John Homans Professor of Surgery
STANLEY COBB, M.D.	Bullard Professor of Neuropathology
EDWIN B. DUNPHY, M.D.	Henry Willard Williams Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary
CYRUS H. FISKE, M.D.	Professor of Biological Chemistry
FELIX G. FLEISCHNER, M.D.	Clinical Professor of Radiology
CHESTER N. FRAZIER, M.D.	Edward Wigglesworth Professor of Dermatology
A. BAIRD HASTINGS, PH.D.	Hamilton Kuhn Professor of Biological Chemistry
PARKER HEATH, M.D.	Clinical Professor of Ophthalmology
IVES HENDRICK, M.D.	Clinical Professor of Psychiatry
FRANC DOUGLAS INGRAHAM, M.D.	Associate Professor of Surgery at The Children's Hospital (died December 4, 1965)
A. LEROY JOHNSON, D.M.D.	Professor of Clinical Dentistry
CHESTER M. JONES, M.D.	Clinical Professor of Medicine
VARAZTAD H. KAZANJIAN, M.D.	Professor of Plastic Surgery
WILLIAM E. LADD, M.D.	William E. Ladd Professor of Child Surgery
SAMUEL A. LEVINE, M.D.	Clinical Professor of Medicine (died March 31, 1966)
ERICH LINDEMANN, M.D.	Professor of Psychiatry
CHARLES C. LUND, M.D.	Clinical Professor of Surgery

SCHOOL OF DENTAL MEDICINE

LELAND S. MCKITTRICK, M.D.	Clinical Professor of Surgery
J. HOWARD MEANS, M.D.	Jackson Professor of Clinical Medicine
PHILIP E. MELTZER, M.D.	Clinical Professor of Otology
CHARLES G. MIXTER, M.D.	Clinical Professor of Surgery (died September 22, 1965)
FRANCIS C. NEWTON, M.D.	Clinical Professor of Surgery
JOHN C. ROCK, M.D.	Clinical Professor of Gynecology
LEROY A. SCHALL, M.D.	Walter Augustus Lecompte Professor of Otology and Professor of Laryngology
GEORGE C. SHATTUCK, M.D.	Clinical Professor of Tropical Medicine
RICHARD M. SMITH, M.D.	Thomas Morgan Rotch Professor of Pediatrics
FRANKLIN FAUST SNYDER, M.D.	Associate Professor of Anatomy and Obstetrics
HARRY C. SOLOMON, M.D.	Professor of Psychiatry
KURT H. THOMA, D.M.D.	Professor of Oral Surgery and Charles A. Brackett Professor of Oral Pathology
FREDERICK H. VERHOEFF, M.D.	Professor of Ophthalmic Research
SHIELDS WARREN, M.D.	Professor of Pathology at the New England Deaconess Hospital
JAMES C. WHITE, M.D.	Professor of Surgery at the Massachusetts General Hospital
PAUL I. YAKOVLEV, M.D.	Clinical Professor of Neuropathology

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Aaberg, T. A.	173	Albert, J.	126
Aaronson, L. D.	126	Albright, F.	322
Abbott, W. M.	254	Albright, J. T.	302
Abbruzzese, A.	137	Aledort, S. L.	231
Abelmann, W. H.	130	Alexander, B.	130
Abraham, A. S.	189	Alexander, G. L., Jr.	225
Abrahams, L. M.	231	Alexander, S.	140
Abramof, I. R. K.	104	Algird, J. R.	252
Abramovicz, A.	103	Aliapoulios, M. A.	259, 302
Abramowicz, M.	110	Allen, D. W.	133
Abrams, A. L.	249	Allen, H. F.	171
Abramson, D.	164	Allen, J. P.	159
Abramson, E. A.	149	Allers, O. E.	196
Abroms, I. F.	199	Alousi, A. A.	206
Achenbach, H.	252	Alper, C. A.	136
Ackerman, I. P.	137	Alper, M. H.	208, 247
Ackroyd, F. W.	249	Alpers, D. H.	137
Acosta, J. M.	255	Alpers, J. B.	115
Adams, C. F.	8	Alpert, D. R.	172
Adams, E. C.	186	Alpert, J. J.	196
Adams, J. G. Jr., ...	249	Alpert, M. E.	149
Adams, R. D.	157	Alshabkhoun, S. A.	255
Adams, R. A.	186	Altman, G. E.	133
Adams, T. W.	196	Altman, H. G.	225
Adamson, L.	133	Altschule, M. D.	131
Adelson, W. J.	198	Alvarado, R.	188
Adelstein, S. J.	103, 150, 241	Alvarez, L. C.	142
Adler, G.	225	Amador, E.	187
Adler, M. H.	225	Amarasingham, C. R.	109
Aeschliman, B. L.	229	Ambrose, C. T.	108
Agranat, B. J.	302	Amdur, B. H.	302
Aharon, A.	199	Ames, A., III	249
Ahmed, A. B. J.	142	Amezcuca, F. J.	198
Aiello, L. M.	172	Amezcuca, J. T.	198
Aisenberg, A. C.	131	Amick, C. J.	189
Akbarian, M.	142	Amory, R., Jr.	9
Aktipis, S.	119	Amos, H.	13, 108
Alano, F. A.	142	Amundsen, E.	255
Alarcon, R.	186	Andell, M. A.	302
Albers, W. H.	199	Anderson, A. S., Jr.	229
Albert, H. S.	221	Anderson, A. E.	188

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Anderson, C. D.	222	Baehner, R. L.	199
Andre-Schwartz, J. A.	109	Baer, G. K.	188
Andresen, J. J.	234	Bailey, C. C.	133
Andrew, N. W.	249	Bailey, H.	242
Andrews, J. S., Jr.	175	Bailey, H. K.	302
Andrikides, A. L.	176	Bailit, I. W.	198
Angelici, D. R.	302	Bain, J. E.	231
Angelillo-Mackinlay, T. A. ...	104	Bain, M. D.	225
Angelini, H. D.	181	Baker, E. P., Jr.	252
Angevine, J. B., Jr.	103	Baker, F.	223
Anliker, J. E.	249	Baker, G. P., Jr.	137
Anselmi, R. T.	206	Baker, M. P.	131
Antonowicz, I.	195	Baker, W. W.	119
Aoki, A.	104	Baker, W. H.	133
Aoyagi, T.	142	Balazs, E. A.	171
Appleton, W. S.	229	Balboni, V. G.	137
Arky, R. A.	133	Baldwin, D. C., Jr.	195
Armstrong, D. T.	302	Ball, E. G.	11, 115
Arnason, B. G. W.	158	Ballantine, H. T., Jr.	246
Aronovitch, J.	110	Balodimos, M. C.	136
Aronow, S.	136	Balogh, K.	185
Asbury, A. K.	158	Banks, B. M.	131
Ashford, T. P.	186	Banks, H. H.	176
Ashworth, M. A.	178	Barger, A. C.	13, 210
Aster, R. H.	133	Baringer, J. R.	159
Atallah, N. K.	243	Barker, R. H.	165
Atanackovic, D.	206	Barlow, C. F.	157, 201
Atanackovic, V.	206	Barlow, J. S.	158
Atkins, L.	184, 193	Barlow, J. J.	164
Atwood, D. A.	302	Barnes, A. R. B.	168
Aub, J. C.	322	Barnes, B. A.	247
Aufranc, O. E.	176	Barnett, G. O.	133
Austen, G., Jr.	248	Barnum, W. J., Jr.	229
Austen, K. F.	112, 131	Barondes, S. H.	231
Austen, W. G.	245	Barr, A. H., Jr.	9
Austin, J. H.	166	Barsamian, E. M.	247
Austin, R. C.	252	Barsh, L. I.	302
Autilio, L. A.	117	Bartholomay, A. F.	131
Auty, J. R.	178	Bartlett, M. K.	245
Avery, N. C.	225	Barton, T. C.	165
AvRuskin, T. W.	199	Basurto, L. P.	255
Awwad, H. K.	241	Bates, F. D.	177
Babior, B. M.	142	Battit, G. E.	249
Baddock, S. S.	189	Baum, R. S.	199
Baden, H. P.	126	Baxter, J. P., 3d	8
Bader, H. I.	302	Bayles, T. B.	131
Badger, T. L.	129	Baylink, D.	142

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Beaser, S. B.	133	Bibring, G. L.	322
Beck, J. C.	234	Bienenstock, J.	142
Beck, W. S.	131	Biezunski, N.	142
Beckwith, J. R.	108	Bigelow, E. L.	8
Beecher, H. K.	245	Bigelow, F. S.	131
Beesley, E. N.	10	Bigelow, N. H.	193
Behringer, G. E.	252	Billiar, R. B.	117
Bejar, J.	140	Binstock, W. A.	225
Bell, E. D., Jr.	137	Birbari, A. E.	142
Bell, N. W.	221	Birchard, W. H.	140
Bellabarba, D.	142	Bird, K. T.	132
Belleau, L.	142	Birk, C. L.	234
Belson, M. O.	165	Birkenfeld, R.	252
Benard, B. W.	142	Birtch, A. G.	211
Benaron, T. 202,	225	Black, H.	249
Benderly, A.	199	Blaine, G. B., Jr.	229
Bendixen, H. H.	246	Blair, A. H.	119
Benedict, P. H.	137	Blanch, E. T.	196
Bengloff, H.	252	Bland, E. F.	129
Benmiloud, M.	142	Blane, H. T.	221
Bennett, G. F.	7	Blank, I. H.	126
Bennett, J. M.	137	Blau, D.	225
Bennett, M. J.	234	Blaufox, M. D.	142
Benson, H.	142	Blennerhassett, J. B.	188
Benton, J. W.	159	Blinkoff, R. C.	110
Bentzel, C. J.	211	Blinks, J. R.	205
Berenberg, W.	194	Blitzer, J. R.	225
Berezin, M. A.	225	Bloch, H. S.	234
Berg, R. B.	194	Bloch, K. J. 112,	133
Berg, S.	249	Bloom, G. E.	199
Bergel, E. W.	229	Bloom, J.	111
Berger, S. M.	167	Bloom, J. D.	234
Berkman, P. M.	142	Bloomfield, R. A.	133
Berlin, R. D.	210	Blout, E. R. 13,	115
Berman, J. M.	229	Blum, A. F.	231
Bernhard, W. F.	247	Blum, R. A.	234
Bernstein, D. S.	133	Blum, S. F.	142
Bernstein, J. M.	182	Blumgart, H. L. 11,	322
Bernstein, N. R.	225	Boda, J. E.	255
Berry, G. P.	322	Boden, G.	142
Berry, Y. J.	181	Boeder, P.	171
Bertland, A. U.	119	Boggs, R. P.	159
Bethune, J. L.	115	Bohrer, S. P.	242
Beuscher, R. B.	229	Bojar, S.	221
Beuscher, W. F.	225	Boling, L. A.	229
Bhattacharyya, A. K.	117	Bond, J. A.	302
Biber, T. U. L.	136	Bondoc, C. C.	255

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Bonier, R. J.	223	Buckley, M. J.	259
Bonner, F. J.	225	Budd, M. A.	143
Boruchoff, S. A.	171	Budde, N. T.	302
Botsford, T. W.	245	Budner, H. M.	232
Boyd, R. J.	176	Budson, R. D.	232
Boyle, W. E.	201	Buie, D. H., Jr.	229
Braceland, F. J.	221	Bull, D. M.	143
Braconier, H. E.	171	Bull, T. A.	232
Bragg, R. L.	225	Bullard, D. M., Jr.	202, 229
Braun, W. E.	142	Bullivant, S.	249
Braveny, P.	206	Bunn, H. F.	143
Braverman, L. E.	137	Burack, W. R.	133, 208
Brazelton, T. B.	196	Burbank, C. B.	252
Breed, F. B.	172	Burgess, A. M., Jr.	215
Brendze, R. B.	177	Burgi, H. R.	143
Briefer, C., Jr.	137	Burgin, L. B.	195
Bright, N. H.	196	Burke, J. F.	247
Briggin, C. S.	231	Burnett, J.	126
Brines, J. K.	196	Burr, F. H.	7
Britten, A. F. H.	140	Burr, P. H.	143
Brobeck, J. R.	10	Burton, K.	135
Brockhurst, R. J.	171	Burwell, C. S.	11, 322
Brooks, H.	93	Busch, G. J.	189
Brooks, H. E., Jr.	167	Busfield, B. L., Jr.	229
Brooks, J. R.	246	Bushnell, L. S.	255
Brooks, L.	234	Bushueff, B. P.	242
Brougham, M.	250	Butler, A. M.	322
Brown, A. C.	229	Butler, D. N.	255
Brown, C. C.	302	Buttenwieser, P. A.	234
Brown, C. E.	232	Buxbaum, R. C.	215
Brown, D. A. J.	167	Cabot, T. D.	8
Brown, H. P.	250	Cadigan, J. B., Jr.	137
Brown, H.	250	Cagan, R. H.	119
Brown, J. M.	252	Cahill, G. F., Jr.	130
Brown, J. W.	199	Cain, A. J.	225
Brown, M. E.	186	Callahan, E. J., III	137
Brown, R. W.	167	Campbell, C. C.	112
Brown, T.	176	Campbell, C.	232
Brown, W. H.	11	Cankardas-Wysocki, A.	223
Brownell, G. A.	8	Cannilla, J. E.	140
Brownell, G. L.	136	Cannon, B.	247
Brownlee, R. E.	137	Cantu, R. C.	211
Brudevold, F.	123, 302	Caplan, L. M.	225
Bruns, R. R.	142	Caplan, G.	219
Brussel, B. B.	225	Caplan, S.	211
Bryan-Brown, P.	232	Capps, F. P. A.	201
Bucher, N. L. R.	133	Carbone, D. F.	302

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Carey, R. J.	141	Chiang, J.	189
Carey, R. W.	137	Chiba, T.	255
Carl, C. W., Jr.	234	Chien, C-P.	234
Carmichael, W. G.	225	Chimosky, J. E.	211
Caro, A.	255	Chisholm, J. F., Jr.	171
Carpenter, C. B.	136	Chiu, T. L.	232
Carpenter, R. L.	171	Christ, J.	225
Carroll, J. M.	172	Christman, E. H.	173
Carroll, R. S.	302	Christman, G.	302
Carter, E. L.	252	Churchill, E. D.	322
Carter, F.	229	Ciccarelli, E. C.	172, 175
Carter, H. W.	188	Ciembroniiewicz, J.	259
Carter, J. R., Jr.	119	Cion, M. C.	234
Carvallo-Gil, E.	143	Civan, M. M.	138, 143
Caskey, W. H.	137	Civantos, F.	189
Caspar, D. L. D.	210	Clafin, E. F.	117
Cass, J. W., Jr.	137	Clark, J. G., Jr.	226
Castelli, W. P.	215	Clark, W. H., Jr.	185
Castle, W. B.	129	Clarke, J. T.	117
Castleman, B.	13, 184	Cleaver, J. E.	255
Cathou, R. E.	136	Clements, A. M.	172
Caulfield, J. B.	184	Clifford, M. H.	138
Cavanaugh, J. J. A.	196	Clifford, S. H.	194
Cavanaugh, T. J.	171	Cline, H. S.	226
Caviness, V. S., Jr.	159	Clough, J. M.	171
Cavins, J. A.	186	Cloutier, G.	229
Chafetz, M. E.	219	Clowes, G. H. A., Jr.	245
Chalfen, M. H.	141	Clubb, R. W.	181
Chalmers, T. C., Jr.	135	Cobb, S.	322
Chalpin, G.	229	Cochran, W. D.	196
Chamberlain, J. W.	250	Cochran, W. G.	216
Chamberlain, J.	206, 302	Cogan, D. G.	171, 174
Chapman, E. M.	131	Coggeshall, R. E.	103, 308
Chapman, R. B.	172	Coggins, C. H.	143
Chapman, T. M.	119	Cogliano, F. D.	259
Chase, L. S.	222	Cohen, A.	196
Chase, T. N.	159	Cohen, C. G.	303
Chasen, M. C.	229	Cohen, C.	190, 210
Chasin, W. D.	181	Cohen, H. C.	143
Chatterton, R. T., Jr.	302	Cohen, J. M.	201
Chaux, A.	255	Cohen, J.	176
Chawla, N. P. S.	143	Cohen, Mandel E.	158
Cheever, F. S.	9, 10	Cohen, M. I.	303
Cheifetz, P. N.	143	Cohen, Michael E.	159
Chen, J. Y. C.	206	Cohen, M. W.	207
Chernew, I. M.	189	Cohen, P.	133
Chez, R. A.	211	Cohen, R. E.	226

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Cohen, R. B.	185	Cowles, J.	8
Cohen, S. I.	141	Coy, W. A.	303
Cohen, S. N.	143	Craig, J. M.	184
Coklica, V.	303	Craig, R. H.	136
Cole, D. W.	252	Craighead, J. E.	186
Cole, R. A.	232	Crane, C.	246
Cole, T. P.	255	Crawford, J. D.	194
Coleman, R. M.	226	Crenshaw, M. A.	212, 303
Coletta, C. G.	252	Crider, A. B.	223, 232
Collins, J. L.	226	Crigler, J. F., Jr.	194
Collis, W. J.	172	Crocker, A. C.	195
Colton, T.	215	Crocker, A. T.	138
Comb, D. G.	116	Crocker, D.	250
Cone, T. E., Jr.	194	Crocker, D. W.	186
Connelly, J. P.	195	Crocker, J.	9
Conroy, M.	135	Crocker, S. C.	138
Constable, J. D.	250	Crone, N. L.	149
Constantopoulos, S.	110	Cronin, T. P.	172
Constantsas, N. S.	117	Cronkhite, L. W., Jr.	215
Cooley, M. H.	143	Crowe, J. M.	250
Coolidge, J. C.	226	Crowell, W. M.	229
Coombs, T. L.	117	Cserr, H. F.	211
Coon, G. P.	221	Cserr, R.	232
Coons, A. H.	108	Cubelli, G. E.	223
Cooper, D. K. C.	103	Culver, P. J.	11, 13, 133
Cooper, C. W.	303	Cummings, T.	10
Cooper, J. J. I.	232	Cummins, J. F.	138
Cooper, R. A.	149	Curran, P. F.	210
Cooperman, S.	188	Currie, G. N.	303
Cope, O.	245	Curtis, G. W.	185, 193
Copel, J. W.	252	Curtis, S. J.	143
Copeland, B. E.	185	Curwen, W. L.	126
Copeland, L. du P.	9	Cutler, R.	10
Copeland, R. B.	149	Cutler, R. E.	226
Coppoc, G. L.	207	Cutler, R. W. P.	159
Coran, A. G.	255	Dalen, J. E.	143
Cornell, N. W.	119	Dalsimer, J. S.	234
Corning, H. B.	149	Dalton, B. C.	252
Corson, J. M.	186	Daly, A. K.	109
Corwin, H. A.	229	Dammin, G. J.	184
Corwin, J. H.	229	Damon, A.	216
Coser, R. L.	221	Dana, G. W.	199
Cote, R. A.	187	Dandrow, R. V., Jr., ...	167
Cotran, R. S.	185	Daniels, E. M.	221
Couch, N. P.	250	Daniels, H. S.	229
Courtiss, E. H.	181	Daniels, J. B.	109
Covelli, V. H.	255	Darby, A. E., Jr.	234

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Darling, R. C., Jr.	252	De Wan, C. J.	187
Darrow, R. A.	116	De Wilde, H.	303
Das, L.	198	Dews, P. B.	13, 208, 219
Datta, D. V.	143	Dexter, C. J.	252
d'Autremont, C. C.	226	Dexter, L.	129
Davidoff, F. F.	143	Deykin, D.	133
Davidovitch, Z.	303	Diamandopoulos, G. T.	187
Davidson, C. S.	13, 130	Diamond, J. M.	210
Davidson, E. M.	226	Diamond, L. K.	194
Davidson, G. E.	226	Dickersin, G. R.	188
Davies, J. E.	108	Dickson, W. A.	196
Davies, M.	211	Dickson, D. N.	242
Davies, R. C.	119	Dierks, M.	234
Davies, D. G.	182	Diethelm, A. G.	255
Davis, B. D.	13, 108	Dillon, R. S.	143
Davis, K. K.	198	DiMascio, A.	223
Davis, N. V.	8	Dine, R. F.	253
Davy, C. L.	190	Dingman, J. F.	132
Dawes, D. C.	226	Dinsmore, P. R.	226
Dawson, D. M.	158	Dinsmore, R. E.	242
Dawson, J. L.	255	Ditmore, D. A.	229
Day, M.	226	Dixon, J. P.	10
Dealy, J. B., Jr.	241	Dixon, R. A.	10
DeAngelis, V.	303	Dodge, P. R.	157, 202
deBono, E. F.	109	Doering, C. H.	119
Deck, J. D.	104	Dogon, I. L.	303
Deep, A. R.	149	Dohlman, C-H.	171
De Friez, A. I. C.	133	Donaldson, D. D.	174
DeGroot, L. J.	133	Donaldson, G. A.	247
de Haas, K. J.	196	Donmoyer, T. L.	149
Deland, F. S., Jr.	10	Donovan, F. J.	141
DeLong, G. R.	159	Donovan, W. M.	232
DeLorme, T. L.	177	Dorsey, J. F.	253
d'Elseaux, F. C.	221	Dorsey, W. R.	196
de Marneffe, F. L. A.	226	Dotter, W. E.	177
DeMoura, L. F. P.	182	Douglas, J. P.	303
Denckla, W. D.	119	Dowben, R. M.	135
Denny-Brown, D. E.	157	Dowd, S.	120
dePeretti, E. S.	119	Doykos, J. D., III	303
Der Kaloustian, V. M.	201	Draskoczy, P. R.	206
Derow, H. A.	131	Dreier, T., Jr.	234
DeSanctis, R. W.	138	Dresden, M. H.	110
Desautels, R. E.	250	Drewes, P. A.	143
Descarries, L.	159	Dreyfus, P. M.	158
Deuel, R. K.	159	Dreyfuss, J. R.	241
Deuel, T. F.	119	Drinker, P. A.	249
Deutsch, S.	247	Driscoll, J. J.	167

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Driscoll, S. G.	186	Eldred, S. H.	219
Drooker, J. C.	181	Eldredge, L. L., Jr.	196
Drorbaugh, J. E.	195	Eliot, T. H.	9
Drum, D. E.	143	Elite, A. E.	234
Dubernard, J-M.	255	Elliott, B. K.	10
Dubin, D. T.	108	Elliott, J. H.	175
Dufau, M. L.	143	Elliott, O.	9
Duff, A. W.	190	Ellis, D. S.	131
Duffy, F. H.	160	Ellis, L. B.	129
Duhig, J. T.	185	Ellison, R. C.	199
Duhl, F. J.	226	Elstein, A. S.	223
Duma, R. J.	143	Eltringham, W. K.	255
Duncan, C. J.	164	Emerson, K., Jr.	130
Dunn, J. T.	120	Emmanuel, H. N.	234
Dunning, J. M.	303	Enders, J. F.	108
Dunphy, E. B.	322	Endo, H.	189
DuPont, R. L.	234	Engel, A. M.	136
Duvelloy, M. A.	255	Engel, L. L.	115, 150
Dwyer, T. F.	219	Engeset, N. J.	253
Dyer, E. C.	196	England, A. C., Jr.	158
Dykes, M. H. M.	250	Engle, R. P., Jr.	226
Earle, R., Jr.	198	Eppinger, E. C.	11, 13, 40, 129
Earley, L. E.	133	Epstein, H. D.	303
Easterday, C. L.	164	Epstein, S. H.	158
Easton, M. T.	171	Epstein, S. S.	187
Easton, W. S.	250	Epstein, W.	210
Eaton, C. F., Jr.	10	Eraklis, A.	253
Eaton, J. M.	160	Erba, G.	199
Eaton, M. D.	108	Erikson, E. H.	221
Ebert, R. H.	11, 13, 93, 129	Ervin, F. R.	219
Ebisuzaki, K.	117	Escalante, O. D.	160
Eckstein, B.	117	Espiner, E. A.	143
Edelman, G. M.	117	Essember, L. J.	196
Eden, M.	215	Essig, A.	133
Edidin, M. A.	110	Esterquest, R. T.	12, 20
Edlow, J.	187	Etherington, J. W.	303
Edwards, A. G., Jr.	181	Evans, G. W.	188
Edwards, E. A.	103	Evans, H.	190
Efron, M. L. S.	158	Evans, R. E.	303
Egbert, L. D.	247	Everett, H. C.	226
Ehrlich, H. L.	303	Ewalt, J. R.	193, 219
Ehrmann, R. L.	186	Eyskens, E.	255
Eichberg, J., Jr.	117	Fainstat, T.	167
Eichhorn, M. M.	120	Fallen, E. L.	143
Eisen, A.	126	Farber, S.	184, 201
Eisendrath, R. M., Jr.	226	Farnham, A. E.	109
Elder, H. A.	109	Farnsworth, D. L.	149

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Farrell, D. J.	303	Fiumara, N. J.	126
Fasciano, R. W.	303	Flacke, J. W.	255
Fawcett, D. W.	20, 103	Flacke, W. E.	205
Fearer, N. H.	196	Flake, C. G.	181
Federman, D. D.	133	Flax, M. H.	186
Feeney, J. J.	11, 13	Fleischner, F. G.	322
Feigon, J. H.	229	Fleming, A. M.	229
Feinbloom, R. I.	200	Fleming, T. C.	159
Feingold, A. H.	229	Flickinger, C. J.	104
Feingold, D. S.	112, 133	Flynn, R. E.	159
Felarca, A. B.	143	Flynn, W. F.	250
Felarca, L. C.	200	Fogelson, F. B.	223
Feldman, D.	104	Folch-Pi, J.	115
Feldman, J. J.	216	Foley, G. E.	186
Feldman, R. G.	158	Folkman, M. J.	250
Fellers, F. X.	194	Foote, W. E., Jr.	223
Fencl, V.	211	Forbes, A. P.	131
Ferguson, C. F.	181	Ford, F. L.	93
Fern, D. J.	229	Foroughi, E.	193
Fiascone, A. D.	198	Forstner, G. G.	143
Fiedler, M. F.	223	Foster, G. S.	138
Field, M.	211	Fowler, J. W.	196
Field, R. A.	131	Fox, C. F.	120
Fienberg, R.	185	Fox, E. O.	187
Finck, A. J.	250	Fox, H. M.	150, 219
Fine, J.	245	Fraenkel, D.	109
Fineman, A. D.	226	Fraenkel, G. J.	248
Finerty, M. L.	160	Fram, D. H.	234
Finesinger, A. L.	226	Franco, F.	253
Finesinger, J. L.	234	Francois, C. J.	176
Finkel, R. M.	149	Frank, A. A.	196
Finkelstein, H. I.	242	Frank, E. D.	246
Finland, M.	129	Frank, H. A.	246
Finstein, I. F.	232	Frank, T.	226
First, R. A.	178	Frankel, F. H.	226
Fischbein, J. W.	138	Franklin, M. J.	198
Fischberg, B. W.	229	Franklin, W.	138
Fisher, C. M.	157	Frantz, A. G.	134
Fisher, J. N., Jr.	196	Franz, J. M.	117
Fisher, S. M.	234	Frazier, C. N.	322
Fishman, D. B.	232	Frazier, H. S.	131
Fishman, D. J.	160	Frazier, W. T.	234
Fishman, N.	303	Frederick, A. R., Jr.	173
Fisk, J. B.	8	Freedberg, A. S.	130
Fiske, C. H.	322	Freedberg, I. M.	126
Fitzgerald, R. G.	234	Freedman, G.	303
Fitzpatrick, T. B.	126	Freese, C. G., Jr.	172

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Freiman, D. G.	184	Ganz, R. N.	196
Freinkel, N.	131	Garabedian, G. H.	200
Freinkel, R. K.	126	Garant, P. R.	303
Fremont-Smith, K.	141	Garceau, A. J.	138
Fremont-Smith, P.	134	Garcia, A. T.	160
Frenk, E.	127	Garcia, C. R.	165
Freund, M. E.	259	Garcia, G. E.	173
Freydinger, J. E.	188	Gardella, J. W.	11, 13, 133
Freymann, J. G.	215	Gardner, F. H.	130
Fricker, S. J.	173	Gardner, G. E.	201, 219
Fried, M. A.	222	Gargill, S. L.	129
Friedell, G. H.	187	Garland, J.	10
Friedler, R. M.	143	Garrick, N. H., Jr.	10
Friedlich, A. L.	134	Gary, J. E.	241
Friedman, C. W. M.	232	Gates, O.	184
Friedman, E. W.	250	Gates, P. H.	226
Friedman, G. D.	215	Gauld, A. G.	165
Friedman, H.	234	Gault, W. B.	235
Friedman, L. J.	229	Geffin, B.	253
Friend, D. G.	20, 131	Gehring, J. R.	172
Friendly, H. J.	8	Geiser, C. F.	198
Frigoletto, F. D.	168	Geller, M.	229
Fu, S-C. J.	117, 190	Gellert, R. J.	303
Fuisz, R. E.	211	Gellis, S. S.	195
Fujii, T.	120	George, J. M.	144
Fukushi, S.	120	Gephart, F. T.	247
Funkenstein, D. H.	220	Gerald, P. S.	194
Funkhouser, R. K.	138	Gergely, J.	116
Furshpan, E. J.	205	Geronimus, L. H.	187
Futterman, S.	174	Gertler, P.	160
Fuwa, K.	118	Geschickter, E. H.	144
Gabathuler, M-P. I.	207	Getz, I. I.	304
Gabbay, K. H.	144	Giambattista, M. A.	200
Gacek, R. R.	181	Gibbons, R. J.	112, 304
Gaffney, T. J.	120	Gibbs, R. W.	253
Gaffud, N.	144	Gibbs, R. F.	253
Gair, D. S.	226	Giddon, D. B.	304
Galan, E. M.	200	Gifford, G. E., Jr.	226
Galdston, R.	202, 226	Gifford, S. R.	220
Galicich, J. H. Jr.	253	Gill, B. F.	226
Gallagher, F. P.	234	Gill, T. J. III	112, 185
Gallagher, J. R.	194	Gilles, F. H.	158
Gallagher, P. G.	250	Gillespie, L.	165
Gallant, D. H.	165	Gilliam, J. I.	242
Galvanek, E. G.	190	Gillis, R. A.	207
Gamble, W. J.	196	Gilman, Samuel	247
Gamm, S. H.	303	Gilman, Sid	158

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Gilmore, C. E.	187	Gordon, S. K.	253
Girod, C. E.	144	Gore, H. M.	185
Giron, R. A.	235	Gore, I.	186
Glass, E. A.	119	Gorini, L. C.	108
Glass, R. L.	304	Gorlin, R.	131
Gleason, R. E.	144	Gorn, R. A.	173
Glicklich, E. A.	127	Gottlieb, L. S.	186
Glimcher, M. J.	176	Gottwald, P. J.	232
Gochberg, S.	167	Gould, P. R.	104
Goertemiller, C. C., Jr.	127	Goulian, M.	138
Gogas, J. G.	256	Grable, E.	253
Gold, H. S.	304	Graham, J. H.	186
Gold, N. I.	195	Graham, J. R.	135
Gold, W. M.	197	Graham, K. M.	138
Goldberg, I. H.	130	Graham, R. C., Jr.	189
Goldblatt, A.	197	Grant, W. M.	174
Goldblatt, J. E.	250	Gravallese, M. A., Jr.	141
Golde, P. J.	223	Gray, E. B., Jr.	250
Goldfine, H.	109	Gray, S. J.	135
Goldfine, P. E.	235	Greaney, J. F.	229
Goldfinger, S. E.	144	Green, G. M.	109
Goldhaber, P. 190,	304	Green, J.	229
Goldin, J.	304	Green, M. N.	187
Goldings, H. J.	226	Green, N. A.	229
Goldman, D.	211	Green, S.	232
Goldman, H.	187	Green, T. H., Jr.	164
Goldman, M.	158	Green, W. T. 14,	176
Goldsmith, R. S.	134	Greenberg, H. L.	250
Goldstein, D. A.	210	Greenberg, J. P.	160
Goldstein, D. P.	166	Greenberg, M. S.	138
Goldstein, E.	144	Greenblatt, G. R.	226
Goldstein, J.	188	Greenblatt, M.	222
Goldstein, L.	210	Greengard, O. F.	118
Goldstein, S.	144	Greenstein, J. L.	9
Goldthwait, J. C.	141	Greep, R. O. ... 11, 13, 93, 103,	304
Goldwyn, R. M.	250	Gregg, W. I.	166
Golub, L. M.	304	Gregory, E. A.	198
Goodale, W. T.	134	Gries, F. A.	144
Goodchild, M. C.	200	Griesemer, R. D.	126
Gooding, C. A.	243	Griffin, P. P.	177
Goodman, A. C.	181	Griffith, J. F.	160
Goodman, D. J. 242,	243	Griffiths, C. T.	166
Goodman, H. M.	210	Grillo, H. C.	246
Goodridge, A. G.	120	Grinspoon, L.	220
Gorbach, A. C.	166	Griscom, N. T.	242
Gorce, F.	160	Grogan, R. H.	164
Gordon, D. F.	304	Grøn, A-M.	304

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Grøn, P.	304	Hamlin, H.	250
Gross, C. W.	182	Hammer, E. I.	138
Gross, J.	130	Hammerstad, J. P.	160
Gross, P. H.	120	Hammond, D. T.	144
Gross, R. E.	245	Hammond, G. L.	256
Grosser, G.	223	Hamolsky, M. W.	135
Grover, J. W.	167	Hampers, C. L.	144
Grunebaum, H. U.	221	Hancock, R.	207
Gruson, E. S.	11	Handler, A. H.	187
Gryboski, J. S.	138	Hanhart, B.	232
Gryska, P. F.	247	Hanson, G.	235
Gudeman, J. E.	235	Hanson, R. A.	160
Gueriguian, J. L.	256	Harcus, T.	141
Guild, W. R.	134	Harder, F. H.	256
Guise, E. R.	177	Hardison, W. G. M.	144
Gulbrandsen, C. L.	144	Hardy, H. L.	136
Gumpert, J. R. W.	256	Hardy, I. B., Jr.	253
Gunalp, A.	110	Harken, D. E.	245
Gupta, J. M.	201	Harper, R. S.	188
Guralnick, E. A.	250	Harris, C. A.	188
Guralnick, W. C.	304	Harris, E. H.	232
Gurewich, V.	134	Harris, G. B. C.	242
Guthrie, A. D., Jr.	198	Harris, H. I.	230
Gutmann, R. D.	144	Harris, W. H.	176
Haber, E. 112,	132	Harrison, J. H.	245
Hackett, T. P.	226	Harrison, J. H. IV	120
Haendel, F.	232	Harrison, R. H.	223
Haessler, H. A.	197	Harter, J. G.	134
Hafs, H. D.	304	Harthorne, J. W.	136
Hagen, D. Q.	232	Hartman, C. W.	232
Hagen, G. A.	144	Hartman, S. C.	116
Hagen, P. O.	110	Hartmann, L. M.	232
Hager, E. B.	138	Haschemeyer, A. E.	136
Hagerman, D. D.	116	Hasegawa, T.	256
Hagopian, P. B.	229	Hasenbush, L. L.	221
Haines, J. A.	144	Haslinger, F.	256
Hakomori, S.	118	Hastings, A. B.	322
Halbfass, H-J.	256	Hatanaka, H.	256
Haley, W. F., Jr.	229	Hatch, F. T.	134
Haley, W. D.	172	Hauser, G.	116
Hall, A. P.	138	Havens, D. W.	235
Hall, T. C.	132	Havens, L. L.	219
Halldorsson, T. S.	201	Hawes, L. E.	242
Hallenbeck, D. F., Jr.	229	Hay, E. D.	103
Hallowell, P.	247	Hayashi, M.	187
Hamilton, D.	104	Haycox, J. A.	226
Hamlin, E., Jr.	246	Hayden, W. L.	181

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Hayes, R. E., III	160	Hershey, J. W. B.	144
Haynes, E. R.	304	Hershman, H. A.	253
Haynes, F. W.	136	Herskovic, T.	141
Hazard, G. W.	198	Hertig, A. T.	94, 184
Hazard, S. W.	197	Herzan, H. M.	226
Head, J. M.	253	Hess, H. H.	158
Heagarty, M. C.	200	Hester, W. J.	190
Healey, S. J., III	250	Hiatt, H. H.	111, 129
Heath, C. W.	136	Hickler, R. B.	132
Heath, P.	322	Hiebert, C. A.	253
Hecker, E.	144	Higa, A.	144
Hedberg, S. E.	253	Higgins, A.	177
Hedley-Whyte, J.	247	Higgins, E. A., Jr.	141
Heerdegen, D. K.	253	Hill, H. Z.	110
Hegsted, D. M.	123	Hill, J. M.	171
Heilbronn, Y. D.	259	Hill, L. T., Jr.	259
Hein, J. W.	304	Hill, W. R., Jr.	126
Heinle, R. A.	144	Himmelhoch, S. R.	118
Heisey, S. R.	210	Hinckley, R. H.	172
Heiskanen, K. O.	256	Hinman, C. H.	166
Heitmann, H. B.	256	Hirsch, C. A.	138
Helfand, Z.	250	Hoagland, M. B.	108
Helfant, M. H.	259	Hoar, C. S., Jr.	250
Helgeson, N. G. P.	190	Hobson, J. A.	230
Hellerstein, E. "E"	185	Hoch, F. L.	132
Hellman, D. E. W.	138	Hoffer, A.	235
Hellman, E. S.	138	Hogan, E. L.	159
Helman, M. E.	127	Hoguet, R. L., Jr.	9
Helpert, M. M.	188	Holden, R. B.	138
Hendren, W. H., III	247	Holder, R.	202, 226
Hendrick, I.	322	Holdsworth, C. D.	211
Henneman, E.	210	Hollenberg, N. K.	144
Henry, P. D.	144	Holmes, L. B.	200
Henshaw, E. C.	134	Hood, G. H., Jr.	10
Hepler, R. S.	173	Hoover, T. D.	304
Herberg, K-P.	160	Hopkins, R. P.	232
Herbst, A. L.	166	Hoppin, F. G., Jr.	144
Herd, J. A.	210	Hord, L. W.	304
Herman, M. V.	144	Horiuchi, M.	304
Hermann, H. T.	221	Hornig, D. F.	9
Hermanson, L.	248	Hörven, I.	173
Hernandez-Oquendo, F.	304	Hoshino, O.	120
Herndon, R. M.	104	Houghton, A., Jr.	9
Herpfer, G. E.	253	Houghton, J. D.	187
Herrera, E.	144	Houle, R. E.	172
Herrera-Acena, M. G.	138	Houssay, R. H.	187
Hersey, F. C.	230	Hovind, K. H.	256

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Howard, F. A.	138	Iversen, L. L.	211
Howard, P. M.	221	Iversen, S. D.	207
Howard, S. D.	235	Jabbari, M.	141
Howe, L. P.	220	Jackanicz, T. M.	305
Hoye, S. J.	250	Jackson, J. H.	138
Hradec, E.	256	Jackson, R. G.	166
Hubbell, J. P., Jr.	197	Jacob, H. S.	138
Hubel, D. H.	205	Jacobson, B. M.	134
Huddleston, J. I.	178	Jacobson, G.	232
Hudson, C. L.	226	Jacobson, H. N.	165
Hugenberger, P. W.	176	Jacoby, G. A.	110
Hugenholtz, P. G.	195	Jagger, P.	136
Hughes, M. C.	235	Jako, G. J.	181
Huggins, C. E.	248	James, R. L.	223
Huizenga, C. G.	190	Jandl, J. H.	130
Huizenga, J. N.	232	Janeway, C. A.	194
Hume, D. M.	248	Janeway, C. M.	144
Hunt, E. E., Jr.	304	Janower, M. L.	242
Hunt, R. D.	187	Jao, R. L.	144
Huntington, D. S.	223	Jaqua, R. A.	190
Hurston, R. O.	235	Jardetzky, O.	205
Hurwitz, D.	130	Jayaraman, J.	145
Hutcheson, B. R.	220	Jayaraman, K.	120
Hutchinson, B. T.	172	Jeanloz, R. W.	115, 150
Hutchinson, J. S. M.	304	Jeannet, M.	256
Huttenlocher, P. R.	158	Jeffery, R. L.	145
Hyde, R. W.	226	Jeffrey, J. J., Jr.	145
Hyslop, N. E.	141	Jenkin, C. R.	118
Idatte, J-M.	144	Jenney, M. E.	256
Inchiosa, M. A., Jr.	136	Jenney, P. B.	227
Incze, J. S.	187	Jewett, J. F.	165
Ingall, D.	197	Jimbo, M.	232
Ingbar, S. H.	130	Jockin, H.	187
Ingersoll, F. M.	164	Joel, C. D.	116
Ingle, D. J.	223	Joel, P. B.	120
Ingraham, F. D.	322	Joftes, D. L.	187
Irwin, J. S.	182	Johannessen, L. B.	305
Irwin, J. W.	181	Johannet, P.	230
Irving, J. T.	212, 305	Johansen, S. C. H.	248
Isenberg, P. L.	226	Johnson, A. L.	322
Iseri, O. A.	186	Johnson, C. C.	171
Ishii, T.	182	Johnson, G. J.	256
Ishikawa, K.	110, 127	Johnson, L. D.	187
Ishizuka, R.	256	Johnson, R.	305
Israel, M.	118, 191	Johnson, R. A.	182
Isselbacher, K. J.	14, 130	Joison, J.	256
Ito, S.	103	Jolly, M. A.	232

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Jonasson, O.	256	Kasdon, E. J.	190
Jones, A. L.	104	Kashket, S.	136
Jones, C. M.	11, 322	Kass, E. H.	108, 150, 190
Jones, L. G.	211	Kastelic, E. F.	305
Jones, T. C.	184	Kastor, J. A.	149
Jones, W. A.	186	Kataja, E. I.	110
Jones, W. N.	177	Katayama, I.	190
Jong, A.	305	Kates, W. W.	235
Joseph, A. T.	253	Kato, J.	120
Joseph, J. B.	197	Katsas, G. G.	193
Joseph, J.	159	Katz, E. P.	176
Jungas, R. L.	116	Katz, J. H.	138
Juul-Jensen, P. F.	160	Katz, R. A.	198
Kagan, H. M.	120	Katz, S. L.	112, 195
Kagi, J. H. R.	134	Kaufman, E. J.	305
Kahana, E. M.	230	Kaufman, I.	227
Kahana, R. J.	221	Kaufman, S. L.	235
Kahn, A.	230	Kaufman, S.	138
Kahn, C. B.	145	Kaulbach, M. G.	149
Kahn, C. S.	188	Kayce, M. M.	227
Kahn, E.	230	Kazanjan, V. H.	322
Kahne, M. J.	221	Kazemi, H.	138
Kail, A. M.	232	Keamy, D. G.	182
Kaitz, A. L.	138	Keasley, R. B.	195
Kakulas, B. A.	160	Keating, J. P.	201
Kalckar, B. W.	112, 136	Keddie, N. C.	256
Kalckar, H. M.	115, 150	Keenan, M. E.	198
Kalis, P. J.	305	Keettel, W. C.	165
Kamat, V.	118	Keevil, C. S., Jr.	141
Kamins, L. P.	235	Keitt, A. S.	145
Kamm, D. E.	145	Kelleher, R. T.	205
Kandel, E. R.	227	Keller, A. R.	190
Kane, C. A.	158	Kellett, M. A.	242
Kane, R. K.	7	Kelley, R. M.	134
Kannel, W. B.	215	Kelley, R. L.	230
Kanter, S. S.	221	Kelley, S. B.	246
Kantrowitz, J. L.	230	Kelly, E. J.	242
Kantrowitz, P. A.	145	Kelly, L. T.	250
Kaplan, D.	242	Kemball, M.	200
Kaplan, S.	227	Kemp, H. G., Jr.	145
Karanfilski, B. T.	145	Kemper, T. L.	160
Karavolas, H. J.	120	Kendall, L. G.	250
Karkhanis, Y. D.	145	Kennedy, E. P.	115
Karmarkar, M. G.	145	Kennedy, J. L., Jr.	197
Karmody, C. S.	182	Kennedy, S.	7, 9
Karnovsky, M. L.	11, 115	Kenney, H. J.	223
Karnovsky, M. J.	184	Kent, C.	181

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Kermond, W. L.	177	Kohn, H. I.	241
Kerr, W. S., Jr.	246	Kohonen, A. T.	182
Kessel, D. H.	188	Kojima, Y.	120
Kessler, K. L. C. von	178	Kolker, P.	256
Keuper, C. S.	126	Koller, A. N.	12
Kevorkian, A. Y.	167	Kolodny, E. H.	160
Kevy, S. V.	195	Konigsmark, B. W.	158
Khan, A. A.	120	Kopald, H. H.	139, 149
Khan, N. A.	235	Kopans, D. E.	166
Khantzian, E. J.	235	Kornberg, A.	117
Khaw, K. T.	197	Kornacker, M. S.	120
Khorana, H. G.	117	Kornicker, W. A.	118
Khouw, F. B. T. H.	305	Kornfeld, W.	230
Khung, C. L.	141	Kosa, J.	195
Kiang, N. Y.	181	Kostas, C. I.	253
Kim, R.	160	Koufman, C. N.	253
Kimball, P. G.	305	Koumans, A. J. R.	230
Kimura, R. S.	181	Kowada, M.	257
King, H. S.	198	Kozak, G. P.	141
King, M. V.	176	Krakow, A. A.	305
King, N. W., Jr.	189	Krane, S. M.	132
Kinnaert, P. C. A.	256	Kranes, A.	130
Kinoshita, J. H.	174	Kravatz, A. S.	159
Kirschmann, C.	110	Kravitz, A. R.	227
Kistner, R. W.	164	Kravitz, E. A.	205, 206
Kjellberg, R. N.	248	Krayer, O.	14, 205
Klavens, G. S.	235	Kretschmer, K.	189
Klayman, M. I.	138	Kretschmer, R. R.	200
Klebanoff, L. B.	222	Krimms, M. B.	230
Kleeberg, U. R.	145	Kris, K. B.	230
Kleman, S. T.	230	Krisher, J. A.	250
Klein, J. O.	150, 195	Kritzman, J.	139
Klein, M. D.	145	Kruger, L. E.	198
Klein, R.	195	Kubzansky, P. E.	223
Klemperer, M. R.	197	Kudarauskas, E. N.	227
Kliman, A.	138	Kuffler, S. W.	205
Kliman, B.	134	Kuftinec, D. M.	232
Kline, T. S.	188	Kulka, J. P.	185
Klotz, R. E.	181	Kum, K.	118
Klumpp, T. G.	10	Kumar, S.	149
Kneer, P.	120	Kundsin, R. B.	249
Knowles, J. E.	182	Kunii, O.	110
Knowles, J. H.	133	Kunz, L. J. J.	109
Knox, W. E.	115	Kupfer, C.	175
Koch, J. P.	118	Kupfermann, I.	233
Koch-Weser, J.	205, 206	Kurkjian, J. M.	182
Kohler, R. E., Jr.	110	Kurland, G. S.	130

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Kury, G.	188	Lebret, L.	305
Kusakcioglu, A.	200	LeCompte, P. M.	184
Kushnir, H.	305	Lederer, R. A.	235
Kuwabara, T.	175	Lee, F. B.	250
Kwass, G. F.	188	Lee, F. I.	145
Ladd, W. E.	322	Lee, F-I.	207
LaFarge, C. G. C.	197	Lee, K. W.	235
Laforet, M. T.	196	Lee, L.	253
Laga, E. M.	190	Lee, S. S.	215
Lambert, P. B.	249	Leeman, C. P.	230
Lamdin, S. J.	253	Lefemine, A. A.	250
Lamkins, B. E.	127	Leff, R.	233
Lamont, J. H.	202, 227	Legg, M. A.	188
Lamont, T. S.	7	Leibovich, M. A.	233
Landis, E. M.	210	Leibowitz, H. M.	173
Landowne, M.	132	Leighton, H. T.	166
Landsman, E.	230	Leith, D. E.	249
Lane, F. J., Jr.	145	Leland, O. S., Jr.	141
Lane, F. R.	166	Lele, P. P.	249
Lang, D. J.	197	Lemay, M. J.	241
Langer, S. Z.	206	Lenneberg, E. H.	220
Langevin, R. E.	243	Lentine, J.	181
Langridge, R.	210	Lerman, J.	132
Larkin, J. E.	178	Lerman, P.	200
Larroche, J-C.	158	Leske, G. S.	305
Lascari, A. D.	200	Leskowitz, S.	108, 150
Lata, G. F.	117	Lessell, S.	173
Laufer, D.	121	Levene, M. B.	241
Lauler, D. P.	134	Levenson, S. S.	253
Lavender, J. P.	242	Leventhal, J. M.	168
Laver, M. B.	248	Lever, W. F.	126
Lawlor, R. C.	172	Levi, L. D.	235
Lawrence, J. E.	10	Levin, A. B.	149
Lawson, G. B.	227	Levin, J. A.	233
Lazaroff, P.	230	Levin, S.	221
Leach, R. E.	177	Levine, B.	227
Leadbetter, G. W.	248	Levine, F. M.	224
Leadbetter, W. F.	246	Levine, H. D.	132
Leaf, A.	129	LeVine, H. O.	230
Leahey, B. D.	171	Levine, S. A.	322
Leak, L. V.	253	Levinson, D. J.	220
Leake, D. L.	305	Levinthal, J. D.	109
Leake, R. C.	198	Levy, J. M.	197
Lear, C. S. C.	305	Levy, P. S.	145, 216
Leary, O. C.	188	Lewenstein, H. J.	253
Leav, I.	189	Lewis, D. K.	181
Leavitt, T., Jr.	166	Lewis, E. J.	145

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Lewis, R. M.	189	Lowell, J. D.	177
Lewit, R. T.	235	Lowenstein, E.	253
Li, T-K.	139	Lowenstein, L. M.	134
Liberman, R. P.	235	Lowey, S.	116
Lichtenberg, F. von.	185	Lowis, S.	251
Lichtenstein, N. S.	139	Lubbe, W. F.	145
Lieberman, B. L.	168	Lubin, M.	205
Liebman, S. D.	171	Lucas, J. E.	139
Ligot, P. N.	145	Ludwig, A. O.	221
Like, A. A.	188	Lund, C. C.	322
Lin, E. C. C.	116	Lurie, A. O.	118
Lincoln, R. C.	305	Lurie, H. J.	235
Lindauer, T.	230, 235	Lyman, C. P.	103
Lindemann, E.	219, 322	Lynch, G. W.	139
Lindquist, R. R.	188	Lynch, J.	253
Linekin, D. M.	145	Lyons, J. H., Jr.	257
Linenthal, A. J.	130	MacArthur, J. D.	257
Lingeman, B. S.	172	MacAusland, W. R., Jr.	177
Lipsitt, D. R.	227	MacCollum, D. W.	246
Lisco, H.	185	MacDonald, A. S., Jr.	197
Liss, J. J.	235	Macdonald, G. J.	305
Litman, L.	235	MacDonald, R. A.	185
Litt, M.	108	Macht, L. B.	233
Little, A. B.	164	Mack, J. E.	221
Littlefield, J. W.	132	Mackay, H. A.	158
Littman, D.	132	MacKenzie, J. M.	221
Litwin, M. S.	251	Mackie, J. E.	139
Livingston, P. B.	235	MacLaren, J. A.	165
Livingstone, J. B.	233	Macmillan, A. S., Jr.	242
Lloyd, J. B.	253	Maddison, D. C.	222
LoBuglio, A. F.	145	Maginn, R. R.	257
Locke, S.	157	Mahan, J. H.	259
Lockhart, A. J.	139	Mahoney, E. M.	251
Loeb, J. L.	8	Mahony, D. T.	251
Loeb, R. F.	8, 10	Majno, G.	184
Lofgren, R. H.	182	Major, P. W.	305
Lombroso, C. T.	157	Makkay, E. S.	221
Long, J. A.	104	Makoff, D. L.	149
Longino, L. A.	246	Makoff, R. K.	121
Loomis, A. L., Jr.	10	Maletskos, C. J.	193
Lorch, S.	233	Malkiel, S.	187
Lorenz, M.	227	Malone, L. J.	167
Lorenzo, A. V.	160	Malone, M. J.	121
Losch, P. K.	305	Maloof, F.	134
Loutfi, G.	118	Malt, R. A.	251
Low, I. E.	109	Maltsberger, J. T., III	230
Lowell, F. C.	132	Maneche, H. C.	190

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Manes, P. R.	233	McArthur, J. W.	130, 202
Mann, L. T., Jr.	117, 190	McBay, A. J.	193
Mann, W.	227	McCall, C. E.	149
Manning, M. D.	196	McCallum, L. T.	254
Mansfield, J. S.	139	McCarley, R. W.	233
Manson, J. G.	177	McCarter, R. H.	221
Manzi, R. A.	253	McCarthy, P. L.	126
Marble, A.	130	McCarthy, R. E.	187
Marbury, W. L.	7	McCaughan, D.	141
Marcello, D. E., Jr.	253	McCombs, H. L.	189
Marcovitch, J. H.	167	McCourt, W. F.	230
Marcus, P. S.	251	McCray, R. S.	141
Marfey, S. P.	181	McCroory, D. J.	233
Margulis, R. H.	168	McCully, K. S.	189
Marino, R., Jr.	257	McCutcheon, R. E.	168
Mark, V. H.	246	McDaniel, L. T.	139
Marks, A. N.	235	McDermott, W. V., Jr.	14, 245
Marks, J. H.	241	McDevitt, H. O.	109
Marnoy, R.	167	McDonald, F. C.	197
Marquis, N. R.	121	McDonald, K. M.	145
Marshall, J. M.	205	McDonald, W. I.	160
Martin, D. B.	134	McDonnell, N. J.	233
Martin, R. P.	118	McDonough, E. F., Jr.	254
Martinius, J. W.	160	McElroy, N. H.	8
Martino, J. A.	145	McEwan, P. J. M.	224
Maruyama, Y.	257	McFarlin, D. E.	160
Masland, R. P., Jr.	195	McGill, M.	110
Mason, B. F.	11	McGill, R. J.	127
Mason, E. A.	220	McGinty, J. B.	177
Massell, B. F.	150, 195	McGovern, J. J.	197
Masters, R.	126	McGowan, B. L.	173
Mathews, M. A.	233	McGugan, A. D.	126
Mathews, M. M.	109	McGuire, M. T.	230
Mathur, V. S.	145	McIntosh, E. N.	167
Matloff, J. M.	257	McKhann, C. F.	251
Matson, D. D.	245	McKittrick, J. B.	251
Matusow, R. J.	305	McKittrick, L. S.	323
Matz, M. H.	127	McLaughlin, E. D.	257
Matzilevich, B.	159	McLaughlin, W. F.	227
Mayer, Jean	212	McLeod, J. G.	160
Mayer, Joseph	224	McMahon, A. W.	230
Mayer, R. F.	158	McMeel, J. W.	172
Mayman, C. I.	159	McMillan, D. E.	207
Maynard, E. P., III	139	McNeely, W. F.	139
Mayo, R. A.	177	McNeill, J. M.	242
Mazer, H. E.	235	McNulty, E. C.	305
McAllister, G. J.	235	McPeck, B.	251

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Meadow, H. C.	11, 13, 93	Miller, D. R.	200
Means, J. H.	323	Miller, L. M.	146
Mechanic, G. L.	176	Miller, M. A.	235
Medalie, J. D.	233	Miller, S. A.	306
Medeiros, A. A.	145	Miller, T. B.	211
Medoff, G.	145	Miller, W. W.	200
Mee, L. K.	104	Mills, J. A.	134
Mee, W. M.	257	Mills, P. B.	306
Mehlman, R. D.	230	Miner, R.	306
Meisler, A.	110	Ming, P-m. L.	188
Meiss, E.	227	Ming, S-C.	185
Meissner, W. A.	184	Minton, R. F., Jr.	259
Melbin, M.	224	Mintz, N. L.	224
Melendez, L.	109	Mintz, S. B.	236
Melin, M.	196	Mirabal-Font, E.	160
Mello, N. K.	224	Misch, R. C.	224
Meltzer, H. Y.	235	Mishler, E. G.	220
Meltzer, P. E.	323	Mitchell, A. M.	139
Mendell, L. M.	211	Mito, M.	257
Mendelson, J.	145	Mitry, H.	227
Mendelson, J. H.	220	Mitsugi, K.	146
Menini, E.	121	Mitus, A. T.	197
Mentzer, W. C., Jr.	201	Mixter, C. G.	323
Menzer-Benaron, D.	221	Mixter, C. G., Jr.	248
Merler, E.	118, 202	Miyamoto, M.	127
Merriam, J. C., Jr.	188	Modell, A. H.	221
Merrifield, J. F.	230	Modest, E. J.	187
Merrill, D.	134	Mody, M. R.	200
Merrill, J. P.	130	Mogami, H.	257
Merrill, K., Jr.	251	Moghul, T. H.	251, 254
Merrington, W. R.	248	Mogul, S. L.	227
Messer, R. J.	242	Mokrasch, L. C.	116
Messner, E.	227	Moldawer, M. E.	233
Meyer, E. J.	173	Moldveen, M. G.	188
Meyer, G. H., Jr.	306	Monaco, A. P.	251
Mezer, J.	166	Monroe, R. G.	195
Michael, J. G.	112	Montgomery, W. W.	181
Michaels, J. J.	196, 221	Moolten, F. L.	146
Michalski, A. H.	257	Moore, E. W.	141
Michelsen, J. J.	251	Moore, F. D.	245
Michener, D. P.	224	Moore, M. J.	160
Michon, J., Jr.	173	Moorrees, C. F. A.	306
Mickel, H. S.	160	Morais, R.	146
Mihm, M. C., Jr.	127	Moran, J. E.	257
Miki, E.	145	Morest, D. K.	103
Miller, A.	224	Morgan, A. P., Jr.	251
Miller, C. C.	254	Morin, E. M.	306

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Morris, M. J.	257	Nakamura, A.	207
Morris, M.	198	Nalbandian, J.	306
Morris, P. J.	257	Nalebuff, E. A.	177
Morris, R. H.	251	Nardi, G. L.	246
Morris, T. A., Jr.	227	Nash, A. H.	161
Morrison, A. P.	235	Nasir-ud-din	121
Morrison, R. S.	139	Nason, L. H.	251
Morrissey, E. J.	178	Nateman, H. L.	139
Morse, L. S.	199	Nathan, D. G.	134
Morse, R. L.	141	Nathan, P.	224
Morse, W. H.	205	Nathanson, L.	141
Moser, H. W.	158	Nau, O. S., Jr.	197
Moses, J. M.	134	Nauen, A. C.	199
Mosher, H. A.	171	Nayfeh, S. N.	257
Mourkidou, S.	257	Nebesar, R. A.	242
Moxley, J. H., III	141	Neikirk, W. I.	197
Mueller, B. C. G.	227	Nelson, N. M.	195
Mueller, E. H.	227	Nelson, S. D.	257
Mueller, H. L.	195	Nemiah, J. C.	220
Muellner, S. R.	248	Nesburn, A. B.	173
Muirhead, D. M., Jr.	109	Nesson, H. R.	139
Mullane, D. J.	251	Neuhauser, E. B. D.	202, 241
Mullen, J. J.	230	Neumann, C. G.	197
Muller, J. J.	224	Neville, A.	121
Mulligan, W. J.	165	Nevinny-Stickel, H. B.	187
Munoz, A.	146	Nevo, S.	146
Munro, R. S.	230	New, P. F. J.	242
Munson, P. L.	205, 306	Newcombe, J. F.	257
Murakami, Y.	182	Newell, J. L.	166
Murawski, B. J.	221	Newton, F. C.	323
Murphy, J. D.	254	Newton, R. A.	251
Murphy, W. F.	222	Nicholi, A. M., Jr.	230
Murray, J. E.	246	Nicholls, J. G.	207
Mushatt, C.	222	Nichols, G., Jr.	123, 129
Mussells, F. L.	215	Nichols, N. P.	230
Mutter, A. Z.	230	Nickerson, A. L.	7
Mutty, L. B.	235	Nickerson, R. J.	215, 308
Myers, G. J.	201	Niffeneger, J. A.	173
Myers, G. S.	132	Nikaido, H.	108
Myerson, D. J.	220	Ning, M.	146
Myler, R. K.	141, 149	Norman, J. C.	251
Nadas, A. S.	194	Notman, M. T.	227
Nadelson, C. C.	233	Nourse, C. H.	200
Nadelson, T.	233	Novitch, A. M.	139
Nahor, A.	236	Oaks, J. H.	11, 306
Nahum, J. P.	236	O'Brien, C. C.	201
Naide, Y.	110	O'Brien, P. I.	177

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
O'Brien, R. G.	243	Paffenbarger, R. S., Jr.	215
O'Brien, T. F.	139	Page, E.	210
Ockner, R. K.	149	Page, L. K.	259
O'Connor, C. F.	200	Page, L. B.	134
O'Connor, J. F.	243	Pahnke, W. N.	236
Odake, K.	146	Paine, A.	236
O'Dea, A. E.	188	Paine, D.	141
Ofner, P.	206, 306	Palay, S. L.	103
Ogata, M.	233	Palmerio, C.	249
Ogihara, K.	146	Panagakos, P. G.	178
Ogihara, T.	178	Paolitto, F. J.	236
O'Hara, E. T.	251	Papermaster, D. S.	189
Ohta, H.	146	Pappas, A. M.	177
Ojemann, R. G.	251	Pappenheimer, J. R.	210
Okagaki, T.	190	Paredes, A. M. C.	257
Oken, D. E.	136	Parisi, A. F.	141
Old, D.	111	Parker, A. H., Jr.	8
Oldden, J. B.	233	Parkes, C. M.	224
Olin, H. S.	230	Parkhurst, E. C.	251
Olive, G. M., Jr.	172	Parra, H. J.	258
Olson, C. B.	207	Parra, N. D.	121
Olson, J. E.	257	Parrish, J. R., Jr.	122
Olson, W. H., Jr.	161	Parry, D. J.	146
O'Mathuna, D.	139	Parsons, L.	12, 164
Onesti, S. J., Jr.	227	Parsons, V.	146
Ono, H.	306	Patch, V. D.	227
Orjasaeter, H.	196	Pathak, M. A.	126
Orkand, P. M.	104	Patkin, S. J.	211
Orkand, R. K.	207	Patterson, R. D.	236
Orme, R. J.	199	Patterson, W. B.	246
Orr, J. C.	118	Patton, A. S.	254
Orr, L. McD., Jr.	259	Patton, G. W., Jr.	168
Osborne, J.	199	Pauk, G. L.	146
Osborne, M. P.	246	Paulus, H.	116
Osborne, R. K.	141	Payne, E. C., Jr.	227
Osler, L. D.	159	Pearlman, A. L.	161
Osterberg, D. H.	159	Pearlman, C. A.	233
Othersen, H. B.	257	Pearlman, J. L.	197
O'Toole, W. F.	190	Pearlman, W. H.	246
Otsuka, M.	207	Pease, P. R.	10
Ottenstein, D.	230	Pechet, G. S.	188
Ottinger, L. W.	259	Pechet, L. P.	134
Ouellette, E. M.	199	Pechet, M. M.	134
Ouellette, R.	146	Peebles, R. R.	227
Owen, O. E.	146	Peebles, T. C.	197
Owens, C. E.	224	Pendergrass, H. P.	242
Ozer, J. H.	121	Peng, T-c.	306

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Perchemlides, P.	121	Plotkin, G. R.	139
Perez-Trujillo, N.	141	Pluth, J. R.	258
Perkin, A. B.	306	Plzak, L. F., Jr.	259
Perlitch, H. D.	224	Point, W. W., III	139
Perlmutter, A. D.	251	Pointer, K.	122
Perlo, V. P.	159	Polin, G. M.	236
Pernokas, L. N.	251	Politoff, A. L.	146
Peronace, A. A. V.	306	Pollack, J.	11
Perry, J. A.	227	Pollard, J. J.	242
Perry, W., Jr.	243	Pollen, A.	171
Pershonok, D.	224	Pollen, D. A.	249
Persky, A. D.	231	Pollock, M.	161
Peters, C. M.	139	Pomeranz, B. H.	211
Peters, J. A.	188	Pontoppidan, H.	248
Petersen, E. A.	306	Pope, A.	157
Petersen, R. A.	172, 173	Poortmans, J. R.	121
Petersen, O. L.	215	Porter, P. J.	195
Petrie, A.	249, 260	Poskanzer, D. C.	215
Pfeffer, W., Jr.	197	Postel, S.	141
Pfefferkorn, E. R.	108	Potchen, E. J.	243
Phillips, A. W.	254	Potsaid, M. S.	241
Phillips, F. J.	236	Potter, D. D.	205
Phillips, J. H.	167	Potter, H. J.	199
Piazza, E. U.	231	Potter, L. T.	206
Picard, E. H.	159	Potter, M. G.	227
Piedrahita, V.	200	Powell, E. D. U.	146
Pier, A. S., Jr.	139	Powell, M. J.	254
Pierce, D. L.	182	Prager, A.	231
Pierce, D. S.	177	Pratt, H. I.	8
Pierce, E. C., Jr.	248	Pratt, L. O.	11
Pike, G. M.	135	Prensky, A. L.	161
Pikula, J. V.	246	Prescott, R.	141
Pinals, R. S.	139	Pretell, E.	146
Pinderhughes, C. A.	222	Price, A. C.	200
Pines, J.	141	Price, D. L.	161
Ping, W. C.	149	Prout, C.	135
Pippitt, R. B.	171	Provan, J. L.	258
Piras, R.	121	Pulido, P.	136
Pirnar, T.	242	Pulley, L. T.	189
Piro, A. J.	141	Pur-Shahriari, A. A.	146
Pittman, H. S.	11	Pusey, N. M.	7, 11, 13
Pittman, J. G.	146	Putnam, T. C.	251, 259
Plauth, B. G.	146	Putschar, W. G. J.	186
Plauth, W. H.	200	Pyles, R. L.	236
Pless, B. I.	200	Quarles, R. H.	122
Plimpton, C. H.	10	Quarton, G. C.	222
Plimpton, F. T. P.	8	Quevedo, W., Jr.	126

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Quigley, T. B.	245	Renwick, A. G. C.	137
Quinby, W. C., Jr.	251	Resnick, R. H.	139
Qureshi, E-u-H-.	146	Retik, A. B.	258
Rabadjija, L.	146	Reuter, S. H.	182
Rabadjija, M.	207	Revel, J-P.	103
Rabinov, K. R.	242	Rever, G. W.	227
Rabkin, M. T.	135	Rexford, E. N.	222
Rachlin, W. S.	251	Reyersbach, G. C.	197
Radin, E. L.	178	Reynolds, E. S., Jr.	186
Raff, M. C.	161	Reynolds, J. R.	9, 93
Raker, J. W.	246	Reynolds, S. L.	199
Rakic, P.	258	Rheingold, J. C.	224
Ramirez, A.	146	Rhine, M. W.	236
Randerath, E. E.	121	Rice, J. O.	231
Randerath, K.	136	Rich, G.	211
Randolph, P. B. F.	236	Rich, J. G.	178
Rapin, A. M. C.	118, 150	Richards, F. F.	139
Rapoport, R. V.	222	Richards, W. A.	139
Rasio, E.	146	Richardson, C. C.	116
Raviola, E.	104	Richardson, E. L.	10
Raviola, G.	104	Richardson, E. P., Jr.	157
Razavi, L. M. B.	109	Richardson, G. S.	248
Razzuk, M. A.	258	Richardson, J. R.	181
Reardon, P. C.	8	Richardson, U. I.	207
Reas, H. W.	207	Richie, R. H., Jr.	197
Record, E. E.	177	Richmond, M. B.	236
Rectanus, D. R.	197	Rieder, S. V.	116, 150
Reddy, A. R.	146	Riegel, K. P.	196
Reddy, W. J.	116, 150	Riemer, K.	172
Reed, J. W.	173	Rifaat, M. K.	189
Reed, R. B.	216	Rife, D. L.	236
Rees, M. K.	147	Riggs, B. C.	222
Rees, S. B.	139	Ringertz, N.	186
Reese, T. A.	104	Riordan, J. F.	116
Regan, C. D. J.	172	Rippey, J. H.	190
Reich, P.	227	Riseborough, E. J.	177
Reichard, J. F.	227	Riseman, J. E. F.	132
Reid, D. E.	164	Rivo, E.	167
Reidy, J. A.	177	Robb, G. L.	200
Reif, L.	111	Robb, R. M.	172
Reilly, P. P., Jr.	233	Robbins, L. L.	241
Reinecke, R. D.	175	Robbins, M. D.	228
Reiser, D. E.	227	Robbins, P. G.	167
Reiss, D.	236	Robbins, S. L.	186
Remensnyder, J. P.	189	Roberts, C. R.	173
Rendall, E. S.	139	Roberts, D.	187
Renshaw, C. L.	178	Roberts, G. P.	118

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Robertson, G. L.	147	Rosenthal, P.	172
Robertson, J. D.	104, 157	Rosenthal, S. H.	236
Robey, J. S.	197	Rosman, N. P.	161
Robinson, C. R.	188	Rosoff, C. B.	248
Robinson, D. R.	139	Rosowsky, A.	118
Robinson, J. C.	200	Ross, J. D.	140
Robinson, P. M.	228	Ross, M.	228
Robinson, S. H.	135	Ross, R. A.	195
Robison, W. G., Jr.	104	Rossi, A. M.	224
Rochlin, G.	219	Roth, D.	254
Rock, J. C.	323	Roth, S. I.	186
Rockenmacher, S.	201	Roth, W. D.	103
Rockefeller, D.	8	Rothblatt, J. M.	306
Rockett, F. X.	254	Rothman, S. S.	212, 306
Roda, J. E.	258	Rotner, H. E.	147
Roddey, O. F.	199	Rourke, J. A.	243
Rodgers, J. B., Jr.	147	Rowbotham, J. L.	251
Rodkey, G. V.	251	Rowe, C. R.	177
Roebach, R. L.	306	Rowe, J. H., Jr.	9
Rogers, A. E.	189	Rubeiz, J. J.	161
Rogers, W. P., Jr.	254	Rubenstein, H. S.	187
Rojas, F. G.	147	Rubin, H. W.	165
Rolde, E. J.	236	Ruboy, J. S.	197
Rollins, N.	231	Ruddy, S.	141
Rolovic, M. P.	200	Ruderman, M.	147
Romanul, F. C. A.	157	Ruderman, N. B.	147
Roopenian, A.	181	Runyon, R. C.	178
Ropes, M. W.	130	Ruscio, J. F.	251
Rosales, C. L.	258	Rush, D.	111
Rosales, R. K.	158	Russell, D. H.	228
Roscoe, J. P.	111	Russell, J. A. V.	236
Rosen, B. J.	147	Russell, P. L.	236
Rosen, F. S.	112, 195	Russell, P. S.	245
Rosen, H. E.	149	Russfield, A. B.	185
Rosen, J. L.	228	Russ-Schnapp, B.	236
Rosen, S. M.	147	Rutenberg, A. M.	246
Rosenberg, E. H.	306	Rutenberg, S. H.	249
Rosenberg, I. H.	139	Rutstein, D. D.	215
Rosenberg, L.	233	Ryan, G. M., Jr.	167
Rosenberger, P. B.	159	Ryan, T. J.	140
Rosenblith, W. A.	181	Ryan, W. J.	224
Rosenbusch, J-P.	147	Ryser, H. J. P.	205
Rosenfeld, L.	254	Saad, F. M.	249
Rosenfield, A. G.	168	Sabath, L. D.	135
Rosenthal, A.	200	Sabbath, J. C.	228
Rosenthal, D. S.	149	Sabesin, S. M.	140
Rosenthal, M. K.	199	Sabin, J. E.	236

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Sabin, T. D.	161	Schatzki, R.	241
Sachar, E. J.	222	Schatzki, S. C.	243
Sachs, B. J.	172	Schecter, A. J.	140
Sack, T.	231	Scheimberg, B. S.	233
Sacks, S.	167	Schepens, C. L.	171
Sadowsky, N. L.	242	Schepis, N. P.	254
Saelens, J. K.	207	Scheuplein, R.	126
Safon, L. E.	167	Schiller, K. F. R.	147
Sagall, E. L.	140	Schindler, A-M.	201
St. Goar, W. T.	140	Schlossman, S. F.	140
Sakai, T.	147	Schmidt, W. M.	202
Sakamoto, Y.	233	Schneider, P. B.	121
Salam, M. Z.	158	Schnitzer, R. D.	228
Salem, M. R.	251	Schoenenberger, G.	121
Salhanick, H. A.	164	Schofield, P.	147
Salvesen, L. C.	231	Scholl, M. L. L.	159, 202
Salzman, C.	236	Schooler, J. M., Jr.	211
Salzman, E. W.	248	Schramm, A. J.	167
Samaha, F. J.	159	Schrier, R. W.	147
Samaraweera, A. B.	236	Schuknecht, H. F.	181
Samaraweera, S.	236	Schulberg, H. C.	225
Sanchez, G. C.	140	Schulman, J., Jr.	140
Sanders, C. A.	140	Schulz, M. D.	241
Sandler, A. I.	140	Schulz, R. Z.	185
Sandler, R.	147	Schultz, S. G.	210
Sanford, B. H.	189	Schumacher, H. R.	147
Sangalang, V. E.	161	Schuster, S. R.	248
Sanger, S.	233	Schwab, R. S.	157
Santamarina, B. A.	167	Schwaber, J. R.	142
Sapir, P. E.	231	Schwartz, A. R.	159
Saravis, C. A.	137	Schwartz, E.	201
Sarin, P. S.	147	Schwartz, L. A.	228
Sarkar, N.	121	Scornik, O. A.	111
Sarris, S. P.	254	Scott, A. W.	171
Sasahara, A. A.	140	Scott, D. H.	172
Satin, D. G.	233	Scott, J. F.	105, 131
Satovick, R. M.	161	Scott, W. N.	212
Saunders, G. A.	140	Scully, R. E.	184
Saxena, B. N.	147	Seale, E. S.	172
Saxon, L.	140	Sear, H. S.	243
Scaife, J. G.	111	Sears, B. R.	251
Scaliter, D. L.	236	Sears, E. M.	197
Scannell, J. G.	247	Seeler, A. O.	136
Sceery, R. T.	197	Segel, A. L.	252
Schachtschabel, D.	189	Seidl, L. G.	149
Schall, L. A.	323	Seigne, T. D.	251
Schapiro, R. H.	141	Seip, M. F.	195

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Seldin, D. W.	136	Shoshan, S.	147
Silverstone, B.	159	Shoul, M. I.	254
Silverstone, N. J.	140	Shriber, W. J.	135
Selenkow, H. A.	132	Shulman, L. B.	307
Selzer, J. G.	228	Shwachman, H.	194
Semon, R. G.	228	Sidd, J. J.	142
Semrad, E. V.	219	Sidel, V. W.	215
Serra, A.	136	Sidley, N. T.	231
Sewall, W. F.	166	Sidman, M.	157
Sexton, L. I.	166	Sidman, R. L.	105, 157
Seyer, J. M.	178	Siegel, G. L.	199
Sha'afi, R.	212	Sifneos, P. E.	220
Shahon, D. B.	252	Sigman, D. S.	121
Shambaugh, A. S.	228	Silberger, J., Jr.	231
Shambaugh, B.	228	Sillman, F. H.	168
Shambaugh, P. W.	233	Silver, E. I.	307
Shannon, D. C.	147	Silverman, I.	197
Shapiro, D.	222	Silverman, S.	220
Shapiro, I. M.	306	Silverstein, H.	182
Shapiro, J. H.	242	Silverstone, L.	199
Shapiro, L. N.	222	Simeone, F. A.	254
Shapiro, R.	254	Simizu, B.	137
Shapiro, R. W.	233	Simmons, R.	258
Sharon, M. R.	147	Simmons, R. J.	172
Sharp, G. W.	206	Simon, M.	241
Sharpe, W., Jr.	231	Simon, W.	211
Shattuck, G. C.	323	Simonian, S. J.	189
Shattuck, G. B.	197	Simons, E. R.	117
Shaw, H. A.	12	Simpson, R. T.	122
Shaw, J. H.	14, 123, 306	Siner, M.	201
Shaw, R. S.	247	Sinesi, S. J.	127
Sheahan, D. G.	190	Singer, D. L.	142
Shea, S. M.	186	Singer, J. G.	228
Sheftel, T. C.	231	Sisson, J. H.	142
Shein, H. M.	234	Sizer, J. S.	258
Sheldon, A. P.	225	Sizer, T. R.	93
Shelton, W. R.	231	Skarnes, R. C.	249
Sheridan, J. D.	207	Skillman, J. J.	258
Sherman, T. F.	147	Skinner, D. B.	259
Sherry, S. N.	197	Slafsky, S. F.	258
Shillito, J., Jr.	248	Slater, E. M.	252
Shimizu, S. I.	161	Sledge, C. B.	177
Shiraki, M.	259	Sloane, A. E.	171
Shirley, R. L.	168	Smith, A. L.	201
Shohet, S. B.	137	Smith, C. B.	194, 207
Shore, S.	182	Smith, D. C.	258
Short, C. L.	131	Smith, D. H.	109

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Smith, E. E.	249	Sparrow, A. W.	201
Smith, E. H.	167	Speck, M.	307
Smith, G. M.	247	Spector, A.	175
Smith, G. Van S.	164	Spector, B.	105
Smith, G.	10	Spiegel, J. P.	219
Smith, J. H.	189	Spievack, A. R.	252
Smith, M. J.	147	Spiro, M. J.	137
Smith, O. W.	164	Spiro, R. G.	116
Smith, R. H.	231	Squire, L. F.	242
Smith, Richard M.	323	Stahler, S.	168
Smith, R. R.	168	Stalvey, H. D.	228
Smith, Robert M.	247	Stanacev, N. Z.	119
Smith, S. B.	167	Stanbury, J. B.	131, 136
Smith, S. R.	231	Stanley, J. A.	173
Smith, S. A.	168	Stanton, A. H.	219
Smith, T. R.	171, 190	Stare, F. J.	123
Smith-Petersen, M.	177	Starkey, G. W. B.	247
Snedeker, L.	197	Starobin, O. E.	142
Snider, M.	196, 225	Starr, A.M.	252
Sniffen, R. C.	185	Starr, A.	252
Snodgrass, P. J.	135	Starvish, C. R.	254
Snow, J. C.	252	Stason, W. B.	149
Snyder, B. R.	228	Stearns, M.	10
Snyder, D. R.	121	Stearns, N. S.	140
Snyder, D.	147	Stearns, S.	135
Snyder, F. F.	323	Steckschulte, D. J.	147
Snyder, J. C.	93, 111, 190	Steck, T. L.	147
Snyder, J. G.	135	Steigbigel, N. H.	148
Snyder, L. M.	147	Stein, H. J.	140
Socolow, E. L.	147	Stein, M.	135
Socransky, S. S.	112, 307	Stein, P. D.	148
Soeiro, R.	111	Stein, S. W.	140
Soeldner, J. S.	140	Steinberg, A. I.	307
Sohier, W. D., Jr.	140	Steinberg, J. D.	148
Sokolovsky, M.	121	Steinke, J.	140
Solomon, A. K.	115, 210	Steinmetz, P.	137
Solomon, H. C.	323	Stellar, L. I.	140
Solomon, P.	14, 219	Stempien, J. H.	307
Soloway, A. H.	249	Stephen, A. M.	117
Soremark, R. S. A.	307	Stephenson, M. L.	137
Sorokin, S. P.	103	Stern, B. D.	307
Sosman, J. L.	242	Stewart, R. C.	142
Sotelo, C.	104	Stewart, W. G., Jr.	177
Sowles, J. H.	307	Stillman, J. S., Jr.	135
Soyka, L. F.	197	Stimson, A. B.	197
Spangler, A. S.	127	Stiver, I. P.	225
Sparks, H. V., Jr.	212	Stock, M.	228

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Stoddard, L. T.	158	Swanson, L. T.	307
Stoeckle, J. D.	135	Swartz, M. N.	112, 132, 202
Stoffyn, A. M.	119	Sweeney, E. A.	307
Stoffyn, P. J.	116	Sweeney, V. P.	161
Stohlman, F., Jr.	136	Sweet, R. H.	142
Stone, A. A.	222	Sweet, W. H.	245
Stone, B. H.	166	Swenson, D. D.	236
Stone, L. A.	234	Sych, M.	248
Stone, Stephen	307	Szabo, G.	103, 126
Stone, Sumner	231	Szymanski, L. S.	234
Stone, W. E.	228	Taber, E.	104
Storm, G.	199	Taft, E. B.	150, 184
Strasberger, L. H.	234	Taft, G. H.	198
Strathmann, W. D.	236	Taft, P. D.	186
Stratton, K.	137	Taira, N.	206, 207
Strauss, E. W.	187	Tait, G. H.	119
Strauss, H. S.	198	Takeda, Y.	111
Strauss, M. B.	136	Takino, T.	189
Streeto, J. M.	148	Talamo, R. C.	201
Streiff, R. R.	148	Talbot, H. S.	247
Strickler, W. L.	254	Talbot, N. B.	194
Strieder, D. J.	148	Talkov, R. H.	140
Strigini, P. F.	111	Talland, G. A.	220
Strock, M. S.	307	Tamada, T.	258
Strock, P. E.	307	Tanaka, K.	148
Strole, W. E., Jr.	142	Tanaka, S.	122
Strom, E. A.	148	Tannen, R. L.	142
Stuart, F. P.	258	Tanzer, M. L.	137
Stults, H. B., Jr.	198	Tao, T-W.	187
Sturgis, G. P.	135	Tartakoff, H. H.	228
Sturgis, S. H.	164	Tashjian, A. H., Jr.	206, 307
Sturnick, M. I.	135	Tassie, J. A.	254
Sturrock, J. B.	228	Taub, J.	199
Suby, H. I.	252	Taubenhaus, L. J.	215
Suescum, A. T.	236	Taylor, A.	212
Sukenik, H. J.	137	Taylor, W. J.	252
Sulit, Y. Q. M.	148	Taymor, M. L.	165
Sullivan, G. L., Jr.	171	Tedeschi, L. G.	189
Sullivan, J. M.	148	Tefft, M.	243
Sullivan, J. F.	159	Tejada-Garcia, A. <i>See</i> Garcia, A. T.	
Sullivan, W. H.	178	Temby, W. D.	231
Sulovic, V.	165	Tew, J. M.	258
Sundaralingham, M.	211	Thaler, M. M.	122
Suwa, K.	254	Thiel, G. T.	148
Suyemoto, J.	188	Thier, S. O.	149
Suzuki, M.	122	Thoen, D. D.	161
Swanson, J. L.	190	Thoma, K. H.	323

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
Thomas, E. W.	207	Tuthill, J. W. G.	198
Thomas, P. J.	307	Tyler, H. R.	158
Thompson, G. E.	307	Uhle, F. C.	206
Thomson, D. H.	148	Ulfelder, H.	164
Thorn, G. W.	129	Ulin, R.	177
Thron, C. D.	206	Ullian, R. B.	140
Thurm, R. H.	142	Ulmer, D. D.	135
Tiernan, J. R.	201	Umansky, I.	198
Tilles, J. G.	148	Umlas, J.	190
Tilley, R. F.	126	Underwood, R. H.	168
Timberlake, W. H.	157	Uwaydah, M. M.	148
Tishler, P. V.	149	Uzman, B. B. G.	187
Toch, R.	198	Vagnucci, A. I.	137
Todd, D. P.	247	Vaidya, V. M.	122
Tolani, A. J.	122	Vaillant, G. E.	207
Toll, K. van S.	159	Valenstein, A. F.	222
Tolman, E. L.	127	Valente, L. J.	307
Tolman, M. M.	126	Valentine, M. D.	148
Tomchik, F. S.	242	Vallee, B. L.	115
Tomita, F.	258	Vallotton, M. B.	148
Torgerson, W. R., Jr.	178	Valverde-Garcia, F.	104
Torres, E. E.	258	van Amerongen, S. T.	228
Tosi, R. M.	111	Van Bogaert, E. C.	168
Toverud, S. U.	307	Van Buskirk, D.	231
Towbin, A.	158	van Campen, G. J.	307
Toy, B. L.	190	Vandam, L. D.	245
Trachtenberg, H. A.	252	Van Der Meulen, J. P.	159
Travis, D. F.	176	van der Molen, R. A.	254
Tremblay, G. C.	122	van der Noordaa, J.	111
Tremblay, G.	148	Vanderpol, M.	228
Trendelenburg, U. G.	205	Van Dongen, C. G.	208
Trevett, L. D.	222	Van Dyke, W.	198
Trieger, N.	307	Van Leeuwen, M. J.	307
Trivus, R. H.	236	Van Orman, P.	182
Tropp, B. E.	111	vanPelt, W.	201
Trott, A. W.	176	vanPraagh, S. Z.	198
Trum, B. F.	12, 185	Vawter, G. F.	184
Tryphonopoulos, J. S.	148	Vayo, H. W.	148
Tsai, S-C. S.	122	Venkataraman, S.	122
Tsai, T-H.	206	Verhoeff, F. H.	323
Tucci, J. R.	148	Verny, T. R.	237
Tucker, A. W., Jr.	166	Vickery, A. L., Jr.	184
Tucker, D. A.	140	Villee, C. A., Jr.	115
Tullis, J. L.	132	Villee, D. B.	196
Turner, M. A.	258	Vinnick, L.	148
Turner, R. H.	179	Vitug, A. J.	161
Turtle, W. J.	198	Vollman, R. W.	259

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Vorenberg, J.	222	Wegner, W. R.	247
Vroom, F. Q.	161	Wei, T-h.	148
Wacker, W. E. C.	132	Weil, J. L.	231
Wagner, H. R.	201	Weille, F. L.	181
Wacks, J.	237	Weinberg, A. N.	135
Waldron, J. T., Jr.	307	Weinberger, J. L.	228
Walker, G. G.	10	Weiner, A. E.	166
Walker, J. C.	254	Weiner, L.	228
Walker, J. E. C.	136	Weiner, N.	206
Walker, M. J.	234	Weiner, R. M.	231
Walker, P. H.	254	Weinfeld, M. S.	178
Wallace, J.	198	Weinstein, L.	195, 216
Wallace, J. S.	168	Weinstein, R. S.	190
Wallach, D. F. H.	116	Weinstock, A.	308
Walter, C. W.	245	Weinstock, M.	308
Walter, M. M., Jr.	228	Weintraub, D.	166
Walzer, S. G.	254	Weintraub, H. D.	243
Walzer, S.	228	Weisberger, D.	308
Wang, C.	254	Weisman, A. D.	220
Wang, C-C.	241	Weiss, A. D.	182
Wanger, S. L.	161	Weiss, B.	122
Ward, M. G.	122	Weiss, J. B.	252
Ware, R. G.	243	Weiss, J. L.	222
Warren, R.	245	Weiss, R. S.	222
Warren, S.	11, 192, 323	Weiss, T. F.	215
Warthin, T. A.	129	Welch, C. E.	245
Washburn, S. L.	228	Welch, K. J.	248
Wasthed, A. B.	308	Weller, T. H.	111, 202
Watkins, A. L.	132	Wellock, W. D.	308
Watson, B. K.	109	Wells, H.	308
Watson, P. L.	228	Wells, J. C., Jr.	140
Watson, R. H.	198	Wells, L. D.	228
Watters, G. V.	159	Wells, R. E.	132
Watton, R. F.	308	Wermer, H.	222
Watts, H. G.	178	Wermer, O. S.	228
Watts, R.	10	Wertelecki, W.	201
Waud, D. R.	206	Wescott, D. A.	254
Wagh, N. C.	225	West, F. J.	172
Waxler, N. E.	225	Wexler, D.	222
Waziri, R.	231	Weylman, W. T.	242
Weatherall, I. L.	148	Wheatley, R. E.	168
Weber, A. L.	242	Wheeler, E. O.	135
Webster, D. A.	148	Wheeler, H. B.	248
Webster, E. W.	241	Wheeler, H. J.	199
Webster, H. deF.	158	Wheelock, F. C., Jr.	252
Wechsler, H.	225	Whiskin, F. E.	231
Wee, T. G.	201	White, H. J.	188

HARVARD MEDICAL SCHOOL

	PAGE		PAGE
White, J. C.	323	Wolff, R.	135
White, M. F.	252	Wolfort, F. G.	259
White, M. K.	199	Wolfson, S.	148
White, P. H.	308	Wolman, H. M.	231
Whitfield, T. J. III	199	Wong, R. K. L.	148
Whitney, J. B.	172, 175	Woodruff, L. M.	252
Wiedman, M.	172	Woods, F. M.	248
Wiesel, T. N.	208, 220	Wool, M. S.	149
Wiesner, J. B.	10	Worcester, J.	216
Wiggins, L. G.	93	Worthen, D. M.	173
Wilfert, C. M.	201	Wright, E. M.	212
Wilgram, G. F.	126, 308	Wright, R. L.	254
Wilkins, E. W., Jr.	248	Wu, T. T.	119
Wilkinson, H. A.	259	Wuerker, R. B.	104
Willer, L. H.	231	Wulsin, H. E.	229
William, T. H.	103	Wuthier, R. E.	308
Williams, C.	135	Wyman, E. T., Jr.	177
Williams, H. W., Jr.	228	Wyman, S. M.	241
Williams, J. A.	248	Yahia, C.	166
Williams, J. H., Jr.	142	Yakovlev, P. I.	323
Williams, R. F.	148	Yamomoto, K.	234
Wilson, D. R.	148	Yankopoulos, N. A.	140
Wilson, N. L., Jr.	237	Yatsushashi, M.	252
Wilson, R. E.	248	Yen, P. K.	308
Wilson, R. V.	228	Yerganian, G.	187
Wilson, T. H.	210	Yerkes, R. C.	237
Wilson, W. L.	308	Yip, S. Y.	127
Winawer, S. J.	140	Young, D. M.	132
Winer, B. M.	135	Young, R. R.	161
Winkler, G. F.	159	Younge, P. A.	165
Winkler, H. H.	212	Yu, D. T.	190
Winkler, M. H.	119	Yukioka, M.	137
Winn, H. J.	112, 247	Yurchak, P. M.	142
Winship, L. L.	10	Zacharias, L. R.	165
Winter, P. M.	258	Zahler, P. H.	122
Winter, W. D., Jr.	195	Zakheim, R. M.	212
Wittenborg, M. H.	241	Zamcheck, N.	135
Woeber, K. A.	140	Zamecnik, P. C.	129
Wohl, M. J.	142	Zaroff, L. I.	254
Wohl, M. E. B.	198	Zarsky, E. L.	231
Wolf, E. G. G.	172	Zarsky, L. R. N.	137
Wolf, M. K.	104	Zatlin, G. S.	201
Wolf, P. A.	161	Zatzman, M. L.	211
Wolfe, D. E.	104, 208	Zaudy, E. C.	198
Wolfe, H. J.	188	Zaver, A. G.	198
Wolff, A. K.	231	Zehavi, T.	122
Wolff, P. H.	202, 220		

OFFICERS OF ADMINISTRATION AND INSTRUCTION

	PAGE		PAGE
Zehavi, U.	122	Ziskind, A.	199
Zeitlin, G. L.	252	Zivin, L. S.	161
Zelewski, L. E.	122	Zoll, P. M.	129
Zetzel, E. R.	219	Zollinger, R. M., Jr.	258
Zetzel, L.	131	Zonana, H. V.	237
Zigelbaum, S. D.	237	Zook, B. C.	189
Zilbach, J. J.	231	Zovickian, A.	182
Zimmerman, C. E., II	258	Zuckerman, W.	258
Zinberg, N. E.	221	Zulqar-nain, B. J.	308
Zinner, J.	237	Zwaig, N.	122

INDEX

Abbreviations	99	Courses, Announcement of, in the Medical School	103
Absence, Leaves of	45	Courses for Graduates	40
Academic Calendar	4	Curriculum, General Descrip- tion of	95
Administrative Board	13	Degree, Requirements for Doc- tor of Dental Medicine ...	48
Administrative Officers	11	Degree, Requirements for Doc- tor of Medical Sciences ...	48
Admission, Foreign Students .	38	Degree, Requirements for Doc- tor of Medicine	46
Admission, Requirements for .	30	Degrees in the Medical Sci- ences, Requirements for ..	41, 49
Admission Procedure, Service- men	37	Degrees of Doctor of Dental Medicine Conferred in June 1965	317
Admission Procedure, Special Students	39	Degrees of Doctor of Medi- cine Conferred in June 1965	268
Admission to Advanced Stand- ing in the Dental School ...	37	Dental Medicine, School of ..	18
Admission to Advanced Stand- ing in the Medical School	36	Dental Medicine, School of, Teaching Staff	302
Anatomy, Department of	103	Dental Medicine, Elective Courses	125
Announcement of Courses in the Dental School	309	Dental School, Student Enroll- ment 1965-66	318
Announcement of Courses in the Medical School	103	Dental School, Student Enroll- ment Summary 1965-66	320
Assembly, Undergraduate	95	Departments, Listing of, <i>be- ginning page</i>	103
Bacteriology and Immunology, Department of	108	Dermatology, Department of	126
Beneficiary and Loan Funds in other Departments of the University	88	Dining Hall	52
Beth Israel Hospital	21	Division of Hours, Dental School	316
Biological Chemistry, Depart- ment of	115	Division of Hours, Medical School	102
Board of Overseers	8	Division of Medical Sciences	41
Boston City Hospital	21	Dormitory	18, 52
Boston Lying-in Hospital	22	Elective Courses, Listing of. <i>See</i> Individual Department	
Buildings, Description of	17	Emeriti Professors	322
Calendar, Academic	4	Employment, Student	53
Cancer Commission of Har- vard University	92	Enrollment, Dental School 1965-66	318
Children's Hospital Medical Center	22	Enrollment Summary, Dental School	320
Colleges Represented by Stu- dents in the Dental School	321		
Colleges Represented by Stu- dents in the Medical School	300		
Corporation, The	7		
Courses, Announcement of, in the Dental School	309		

INDEX

Enrollment, Medical School 1965-66	280	Internship Appointments, Class of 1965	273
Enrollment Summary, Medical School	299	Laboratory of Community Psychiatry. <i>See</i> Psychiatry, Department of	
Examination, General, for De- gree Candidates	44	Leaves of Absence	45
Examinations and Promotion	43	Lectureships	91
Faculty, Listing by Depart- ment, <i>beginning page</i>	103	Legal Medicine, Department of <i>See</i> Forensic Pathology, Di- vision of	
Fees and Expenses	49	Libraries	19
Fellowships	54	Loan Funds in the Dental School	87
Fellowships and Scholarships in other Departments of the University	67	Loan Funds in the Medical School	85
First Year Schedule	100	Loan and Beneficiary Funds in other Departments of the University	88
<i>See also</i> General Plan of In- struction		McLean Hospital	25
Foreign Students, Admission Procedure	38	Massachusetts Eye and Ear In- firmary	26
Forensic Pathology — Depart- ment of Legal Medicine, Di- vision of	192	Massachusetts General Hospital	26
Fourth Year Schedule	101	Massachusetts Mental Health Center	28
<i>See also</i> General Plan of In- struction		Medical College Admission Test	34
Free Hospital for Women	25	Medical School, Student En- rollment	280
General Plan of Instruction First Two Years	95	Medical School, Student En- rollment Summary 1965-66..	299
Third and Fourth Years ...	96	Medical Schools Represented by Students who Entered Dental School with Ad- vanced Standing	321
General Regulations	43	Medical Schools Represented by Students who Entered Medical School with Ad- vanced Standing	301
Graduates, Courses for	40	Medical Sciences, Division of	41
Gynecology. <i>See</i> Obstetrics and Gynecology, Depart- ment of		Medical Sciences, Higher De- grees in	41, 49
Harvard Medical Center	30	Medicine, Department of	129
Health Service, Student	53	Microscopes	51
History and Organization of the Medical School	15	Museum, Warren Anatomical	20
Hospitals	21	National Scholarships, Dental School	66
Hours, Division of, Dental School	316	National Scholarships, Medical School	57
Hours, Division of, Medical School	102		
Howe Laboratory of Ophthal- mology	174		
Instruction, General Plan of ..	95		
Interdepartmental and Special Courses	264		

INDEX

Neurology, Department of ...	157	Second Year	100
Neuropathology, 163. <i>See also</i> Neurology		Third Year	101
New England Deaconess Hos- pital	28	Fourth Year	101
Obstetrics and Gynecology, Department of	164	<i>See also</i> General Plan of In- struction	
Officers, Administrative	11	Scholarships	57
Officers of Administration and Instruction, Index of	324	Scholarships, Dental School ..	65
Ophthalmology, Department of Ophthalmology, Howe Labora- tory of	171 174	Scholarships, Medical School ..	57
Organization and History of the Medical School	15	Scholarships and Fellowships in other Departments of the University	67
Orthopedic Surgery, Depart- ment of	176	School of Dental Medicine ..	18
Otology and Laryngology, De- partment of	181	School of Dental Medicine, Teaching Staff	302
Overseers Board of	8	School of Public Health	42
Overseers' Committee to Visit the Medical and Dental Schools	10	School of Public Health Elec- tive Courses	267
Pathology, Department of ...	184	Second Year Schedule	100
Pediatrics, Department of ...	194	<i>See also</i> General Plan of In- struction	
Peter Bent Brigham Hospital	28	Servicemen Admission Proce- dure	37
Pharmacology, Department of	205	Special Students, Admission Procedure	39
Physiology, Department of ...	210	Student Employment	53
Plan of Instruction, General ..	95	Student Health Service	53
President and Fellows of Har- vard College	7	Students Enrolled in Dental School 1965-66	318
Preventive Medicine, Depart- ment of	215	Students Enrolled in Medical School 1965-66	280
Prizes, Dental School	91	Surgery, Department of	245
Prizes, Medical School	90	Third Year Schedule	101
Professors Emeriti	322	<i>See also</i> General Plan of In- struction	
Promotion, Rules Governing ..	45	Tropical Public Health	265
Promotion Boards	44	Tuition	49
Psychiatry, Department of ...	219	Tutorial Program and Student Research	98
Public Health, School of	42	Undergraduate Assembly	95
Radiology, Department of	241	Vanderbilt Hall	18, 52
Regulations, General	43	Veterans Administration Hos- pital (West Roxbury)	29
Research Funds	93	Visiting Committee	10
Research, Opportunities for ..	94	Warren Anatomical Museum	20
<i>See also</i> Tutorial Program		West Roxbury Veterans Ad- ministration Hospital	29
Rules Governing Promotion ..	45	Withdrawal from the Medical School	46
Schedule: First Year	100		

SEP 1966

WESBY

